

# **Appendix A**

## *Commercial Water and Sewer Capacity In Monticello Urban Service Area*

## **Appendix A: Commercial Water and Sewer Capacity in Monticello Urban Service Area**

### **Sewer**

#### Current System

1,000,000 gpd total for system

Average commercial waste water usage: 1300 cubic feet per month

1,300 cubic feet per month converted to gallons per month 9724.675

9724.675/ 30 days = 324.16 gallons per day

Currently 252 commercial units connected to waste water

324.16 gpd x 252 commercial units connected to water = 81,688.32 gpd

81,688.32 gpd / 1,000,000 gpd = 8.17 percent of capacity

1,000,000 gpd / 2 = 500,000 gpd capacity with residential usage taken out

500,000 gpd – 81,688.32 gpd = 418,311.68 gpd capacity less 8.17 percent of commercial usage

1,000,000 gpd/418,311.68 gpd = 2.39 x 252 commercial units = 603 commercial units for total capacity of sewer system

### **Water**

#### Current System

1,333,000 gpd total for system

Average commercial water usage: 1800 cubic feet per month

1800 cubic feet per month converted to gallons per month 13,464.935

13,464.935/30=448.83 gallons per day

Currently 247 commercial units connected to water

448.83 gpd x 247= 110,861.01gpd

110,861.01 gpd / 1,333,000 gpd = 8.32 percent of capacity

1,333,000 gpd/2 = 666,500 gpd capacity with residential usage taken out

666,500 gpd – 110,861.01gpd = 555,639 gpd capacity less 8.32 percent of commercial usage

1,333,000 gpd/ 555,639 gpd = 2.40 x 247 commercial units = 593 commercial units for total capacity of water system

# **Appendix B**

*Future Land Use Projections*

*Build Out Methodology and Calculations*

## Appendix B: Future Land Use Projections Build Out Methodology and Calculations

### Build Out Methodology

The 100-year and total build out scenarios are based on several factors and assumptions. The average yearly growth rate of .006816 was determined from the previous years of 1970-2010. The FLUM allows for a total of 67,197 dwelling units, based on data provided from Jefferson County Planning Department and GIS data. According to BEBR, the average household population in 2010 was 2.49. Taking the 67,197 dwelling units and multiplying 2.49 people per unit equals the build out population of 167,321. That population will not be achieved for more than 355 years based on the current population and assumed .006816 annual growth rate.

To determine the 100 year residential need, year 2112, the total population was determined to be 29,514 divided into the average household population of 2.49, for a result of 11,853. Based on the 2010 Census data, the total housing units numbered 6,632. Subtracting the 6,632 from 11,853 the result is 5,221 for the maximum build out less total existing housing units.

Table 1.1: Housing Units Required in 2112

2010 Census Total Occupied HU:	5,646
2010 Census Total HU:	6,632
Total Build Out Less Total Existing HU:	5,221
100 Year Population Projection (year 2112):	29,514
29,514/2.49= (housing units)	11,853

To determine the total build out, year 2367, the total population was determined to be 167,321 divided into the average household population of 2.49, for a result of 67,197. Based on the 2010 Census data, the total housing units numbered 6,632. Subtracting the 6,632 from the 67,197 the result is 60,370 for the maximum build out less the total existing housing population.

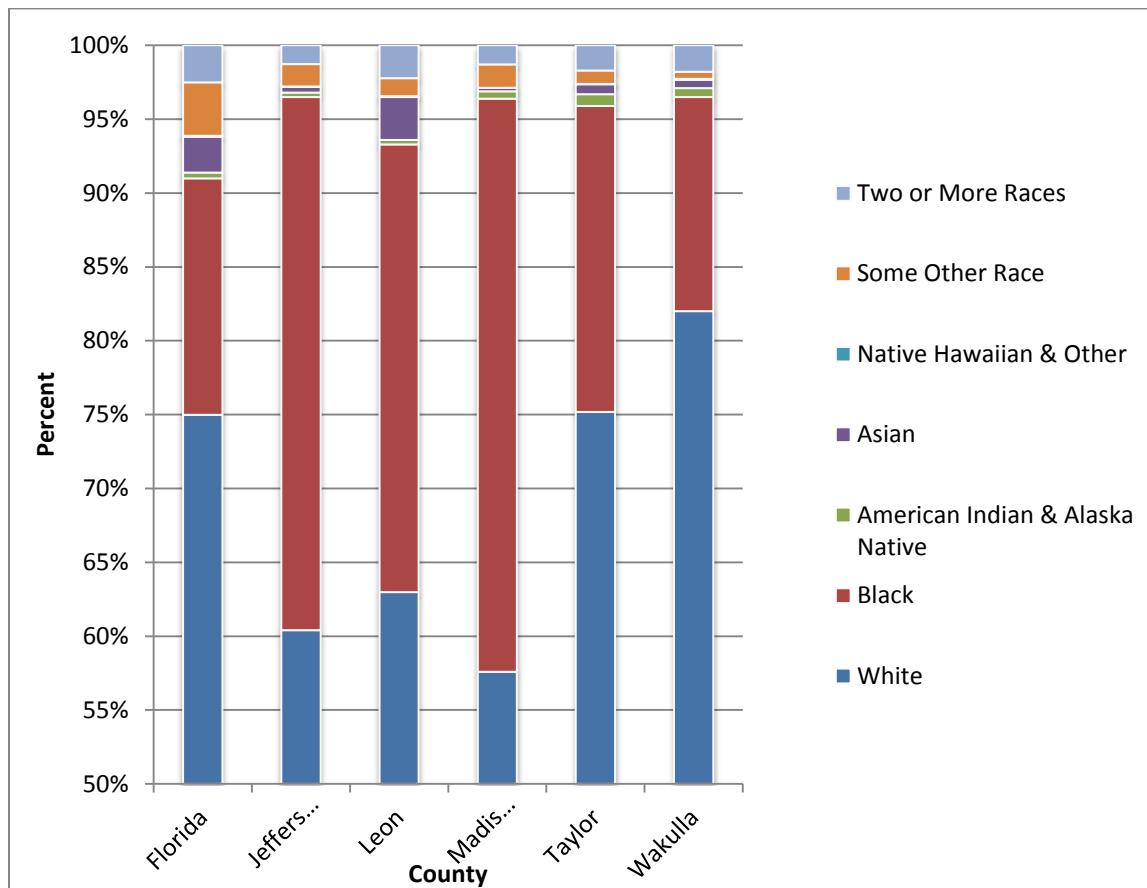
Table 1.2: Housing Units Required in 2367

2010 Census Total Occupied HU:	5,646
2010 Census Total HU:	6,632
Total Build Out Less Total Existing HU:	60,370
Maximum Population Projection (year 2293)	167,321
100,596/ 2.49 (housing units)	67,197

# **Appendix C**

## *Demographics*

## Appendix C: Demographics



*Appendix Figure C.1: Jefferson County Racial composition (2010)*

Source: U.S. Census 2010

*Appendix Table C.1: Jefferson County Changes in Ethnicity, 2000 and 2010*

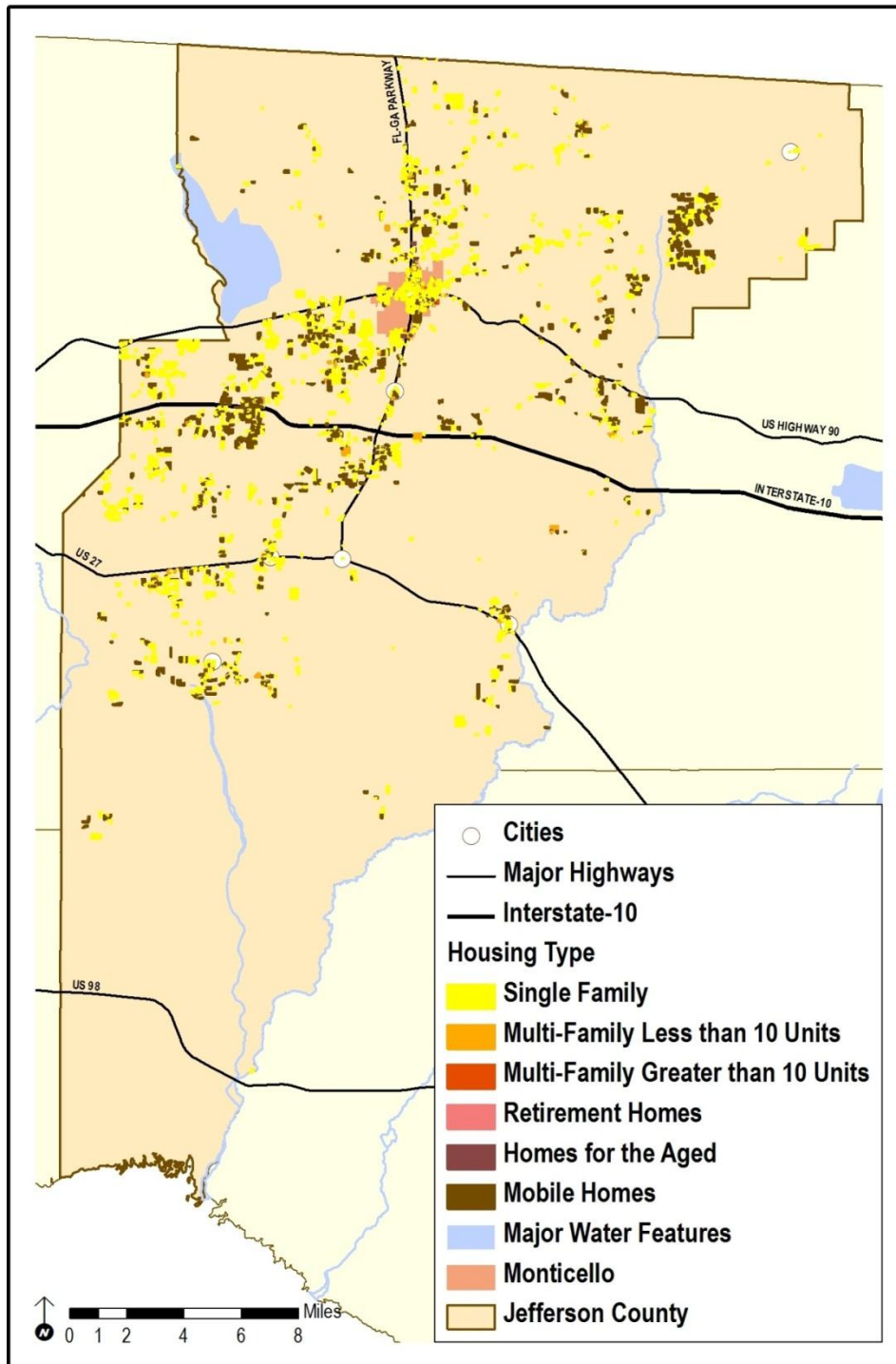
Table 6.3 Jefferson County Changes in Ethnicity, 2000 to 2010		
2000	Hispanic	Non-Hispanic
	2.2%	97.8%
	290	12,612
2010	Hispanic	Non-Hispanic
	3.7%	96.3%
	546	14,215
Percent Growth		

88%

12%

Source: U.S. Census 2000 Table P04

Source: U.S. Census 2010 Table P4



*Appendix Figure C.2: Jefferson County Residential Housing types*

Source: Florida Department of Revenue, 2010

# **Appendix D**

## ***INDIVIDUAL SURVEY FORM***

#### **APPENDIX D: INDIVIDUAL SURVEY FORM**

Below is a copy of the individual survey that was handed out to participants. The studio received 68 completed surveys.

### Jefferson County Visioning Session

*The purpose of this questionnaire is to get to know the Jefferson County community*

**Age Range?** Under 18 18-25 26-35 36-45 46-55 56-65 66-75 Over 75

**Gender?** Male Female

**Race?** White Black Hispanic Asian Other

**Neighborhood of residence?**

Alma	Ashville	Aucilla	Capps	Casa Blanco
Cody	Dills	Drifton	Fanlew	Festus
Fincher	Jarrott	Lamont	Limestone	Lloyd
Lois	Monticello	Monitvilla	Nash	Thomas City
Wacissa	Waukeenah	Other _____		

**Are you a lifelong resident of Jefferson County?** Yes No

If **no**, how many years have you lived in Jefferson County? \_\_\_\_\_

**Which category best describes your total family income during the last year?**

Less than \$10,000	\$35,000 - \$49,999
\$10,000 - \$14,999	\$50,000 - \$74,999
\$15,000 - \$24,999	\$75,000 - \$99,999
\$25,000 - \$34,999	\$100,000 or more

**Are you a homeowner?** Yes No

**Do you own a business in Jefferson County?** Yes No

**Do you work in Jefferson County?** Yes No

If **no**, which city/county? \_\_\_\_\_

**Why do you live in Jefferson County? Please circle all that apply.**

Family                                      Climate                                      Rural Lifestyle  
 Job    Arts and Culture                                      More Affordable  
 Other \_\_\_\_\_                                      N/A

**Please check the importance of the following issues:**

Issue	Very Important	Important	Moderately Important	Of Little Importance	Unimportant	I don't know
Education						
Affordable Housing						
Public Safety						
Transportation						
Health Care						
Job Growth						
Business Expansion						
Environment						
Historic Preservation						
Leadership						
Public Facilities						
Social Services						
Recreation/Entertainment						
Diversity						

**What do you like most about Jefferson County and why?**

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**What do you dislike most about Jefferson County and why?**

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**What type of place would you like Jefferson County to be in 50 years?**

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**What are the top three things that need to happen to make Jefferson County into that place you just described?**

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_
3. \_\_\_\_\_  
\_\_\_\_\_

## Demographic Survey Results

### Question 1: Age Range?

	<b>Under 18</b>	<b>18-25</b>	<b>26-35</b>	<b>36-45</b>	<b>46-55</b>	<b>56-65</b>	<b>66-75</b>	<b>Over 75</b>
<b>October 18th</b>	0	0	1	4	11	14	5	4
<b>October 24th</b>	3	0	2	3	6	7	7	1
<b>Total</b>	3	0	3	7	17	21	12	5

### Question 2: Gender?

	<b>Male</b>	<b>Female</b>
<b>October 18th</b>	19	20
<b>October 24th</b>	10	18
<b>Total</b>	29	38

### Question 3: Race?

	<b>White</b>	<b>Black</b>	<b>Hispanic</b>	<b>Asian</b>	<b>Other</b>
<b>October 18th</b>	36	2	0	2	0
<b>October 24th</b>	6	20	0	0	3
<b>Total</b>	42	22	0	2	3

#### Question 4: Neighborhood Residence?

October 18th		October 24th		TOTAL	
Ashville	0	Ashville	3	Ashville	3
Aucilla	0	Aucilla	2	Aucilla	2
Capps	1	Capps	0	Capps	1
Casa Bianca	0	Casa Bianca	1	Casa Bianca	1
Dills	3	Dills	0	Dills	3
Hwy 90	1	Hwy 90	0	Hwy 90	1
Lamont	1	Lamont	1	Lamont	2
Lloyd	4	Lloyd	1	Lloyd	5
Montivilla	3	Montivilla	2	Montivilla	5
Monticello	22	Monticello	13	Monticello	35
Roostertown	0	Roostertown	1	Roostertown	1
Tallahassee	0	Tallahassee	2	Tallahassee	2
Thomas City	2	Thomas City	0	Thomas City	2
Wacissa	0	Wacissa	1	Wacissa	1
Waukeenah	1	Waukeenah	2	Waukeenah	3

#### Question 5: Are you a lifelong resident of Jefferson County?

	Yes	No
<b>October 18th</b>	10	27
<b>October 24th</b>	19	8
<b>Total</b>	29	35

*If no, how many years have you lived in the County?*

<b>Average</b>	16.87142857
<b>Standard Deviation</b>	13.02449212
<b>Maximum</b>	50
<b>Minimum</b>	3
<b>Median</b>	12

**Question 6: Which best describes your family income last year?**

	<b>Less than \$10K</b>	<b>\$10K- \$14,999</b>	<b>\$15K- \$24,999</b>	<b>\$25K- \$34,999</b>	<b>\$35K- \$49,999</b>	<b>\$50K- \$74,999</b>	<b>\$75K- \$99,999</b>	<b>\$100K or more</b>	
<b>October 18<sup>th</sup></b>	0	0	2	1	8	3	1	19	
<b>October 24<sup>th</sup></b>	0	2	4	2	4	4	5	2	
<b>Total</b>	0	2	6	3	12	7	6	21	

**Question 7: Are you a homeowner?**

	<b>Yes</b>	<b>No</b>
<b>October 18<sup>th</sup></b>	36	2
<b>October 24<sup>th</sup></b>	23	4
<b>Total</b>	59	6

**Question 8: Do you own a business in Jefferson County?**

	<b>Yes</b>	<b>No</b>
<b>October 18<sup>th</sup></b>	14	25
<b>October 24<sup>th</sup></b>	4	23
<b>Total</b>	18	48

**Question 9: Do you work inside Jefferson County?**

	<b>In Jeff Co</b>	<b>Outside of Jeff Co</b>
<b>October 18<sup>th</sup></b>	23	16
<b>October 24<sup>th</sup></b>	11	17
<b>Total</b>	34	33

### Question 10: Why do you live in Jefferson County?

	Family	Climate	Rural Lifestyle	Job	Arts and Culture	More Affordable	N/A
<b>October 18<sup>th</sup></b>	18	10	29	14	7	11	0
<b>October 24<sup>th</sup></b>	18	6	9	4	0	5	2
<b>Total</b>	36	16	38	18	7	16	2

Other answers included:

Friendly
Historical properties
Historic home and community
Peace and quiet
Born here, never wanted to leave
small town life
outdoors and privacy
business owner
The people here
native Floridian
mom made us move here
our mom just decided to move here

**Question 11: Please rate the importance of each issue? 1 being least important, 5 being most important**

	Average (Oct. 18)	Stand. Dev (Oct. 18)	Average (Oct. 24)	Stand. Dev (Oct. 24)	Average (Total)	Stand. Dev (Total)
<b>Education</b>	4.63	0.79	4.96	0.19	4.77	0.63
<b>Affordable Housing</b>	3.59	1.19	4.71	0.60	4.08	1.12
<b>Public Safety</b>	4.46	0.69	4.88	0.43	4.63	0.63
<b>Transportation</b>	3.76	1.15	4.67	0.48	4.14	1.03
<b>Health Care</b>	4.39	0.64	4.79	0.41	4.57	0.58
<b>Job Growth</b>	4.58	0.76	4.82	0.55	4.68	0.68
<b>Business Expansion</b>	4.54	0.80	4.69	0.55	4.60	0.71
<b>Environment</b>	4.53	0.65	4.74	0.53	4.62	0.60
<b>Historic Preservation</b>	4.56	0.72	4.68	0.56	4.61	0.66
<b>Leadership</b>	4.67	0.63	4.88	0.33	4.76	0.53
<b>Public Facilities</b>	4.11	0.85	4.74	0.53	4.38	0.79
<b>Social Services</b>	3.87	0.93	4.75	0.52	4.24	0.90
<b>Recreation/Entertainment</b>	4.14	0.99	4.67	0.55	4.37	0.87
<b>Diversity</b>	4.11	1.01	4.60	0.65	4.31	0.90

The following are the free response answers to the free response questions in the survey.

## Question 12: What do you like most about Jefferson County and Why?

October 18<sup>th</sup> Responses:

Friendly small town, safe, rural feel, open spaces
Friendliness, safety, family, rural lifestyle. Have lived and worked in metro area and appreciated the small home town feeling of Jefferson County
The Wacissa River! Fun, fish, enjoy
Away from large towns - openness - land not too far from large town
Historic homes/quaintness of city
Historic preservation
Peaceful, quiet, beautiful, friendly/honest people. Close but not too close to a big city which has great arts and entertainments. No stop lights!
Rural/small town lifestyle. Like living in Mayberry. Historic buildings. Dark skies. Clean air and water.
Rural lifestyle, fine people
Rural lifestyle, low crime
Pace of life, healthy environment, community spirit, opportunity for future economic development, location adjacent to Tallahassee and universities and events
Rural character, historic structures, unpolluted rivers, lots of eclectic people
The rural atmosphere - relaxing area, trees, environment, wildlife
Its persona
The opera house and the art gallery. Beautiful place to live. Quiet. Lots to do. People are kind.
Great people
wonderful people - Lifestyle - Quiet - Safe - Beautiful Land
small town atmosphere. Good place to raise children.
rural lifestyle/ safe
not crowded, rural setting, privacy, good people, low crime
very friendly place, good place to live
the rural lifestyle - small town
charming small town atmosphere - friendly and comfortable
rural county and easy access to Tallahassee
rural landscape, nature, laid back lifestyle. Affordable real estate, proximity to great education and healthcare. Outdoor recreation. Historic Monticello
The 'community' mindset. Friendly residents. Collaborative efforts.
small town lifestyle- folks look out for one another. Things are simple- no traffic lights
quality of life for active retiree. Proximity to everything- arts, culture, shopping, sports venues, University proximity
small, very friendly, relaxed
The beauty- especially the rolling hills
small town, rural

the rural lifestyle and culture
small town friendly people. We take care of each other. Rural lifestyle
rural ambience
rural community
the people, the wealthier christian community that prays for each other
hometown feel. Friendliness of residents. Location relative to Tallahassee and Thomasville. Clean environment. Rural atmosphere. Variety of stuff to do (cultural, outdoor activities). Historic places

#### October 24<sup>th</sup> Responses:

The people here are great, the land is beautiful, and the food is good
That it has no stop lights and convenient to be somewhere on time (No Traffic)
Family, friends, location
I grew up in Jefferson County and it was a small area which enabled me to become a very productive young woman as a result of the education I was able to obtain.
The small town lifestyle, the personability, and the community feel.
The small town feel
I like the small rural setting, the historic pristin setting. The friendly atmosphere.
It is a very nice town and people are very nice
Small county/town; Farmland but less workload
Peaceful
cost of living
small country town very good for retirees
small county town
small county town, my family lives here
small town atmosphere, friendly people, low crime rate, closeness of the community
rural setting
well I have family down here and up state but what I like most is being in 4-H, helping others, meeting others and learning new things. I love being involved in educational things and I plan on going to school until I think its time to stop. I wanna be educational.
I don't really like it because there is nothing to do
the people are very nice and comforting
I would like a YMCA (not relevant)
Slow pace of life because I am retired
family, friends, home grown
rural, quiet
rural, close to Tallahassee, Georgia, coast and rivers
culture, diversity, open places
ease of doing business, friendly people, central location to Tallahassee, Thomasville

### Question 13: What do you dislike most about Jefferson County and Why?

October 18<sup>th</sup> Responses:

Polarization of ideas (need to join in a common goal), Bedroom community (no jobs)
Lack of variety and diversity of activity and shopping. Public education system needs complete revamping
N/A
Some leadership
Education system
Lack of shopping options
School system, empty shops, lack of jobs
Dying town and businesses. No jobs or prospects for growth. Prejudice.
Need better schools, some people went growth. Just for the sake of growth
Lack of job opportunities, school system
Dead town, no business - Run down buildings and strip malls; Ineffective government - old boys club, reluctant to progress; worst school system in existence; community (big majority) locked in past and overly focused on no change; Image of being backwards & poor; hard to attract business and new young families with children
Ignorance of population, fear of progress by populace, rich landowners controlling too much, keeping real economic progress from happening, no job prospects for my children, lack of property owners using good taste, destroying much historic property
Not enough emphasis on public education, transportation, use of railroad to Tallahassee
not much
Things sometimes change too slowly. People are stubborn.
little change
Need more businesses- jobs. Improve school system.
limited recreation/ entertainment- esp for children
schools
poor schools- no parent support or community backing
there are not many jobs in the county, need better school system
education needs improving
small town- more diversity, arts & culture
how central govt. officials interpret and enforce the laws. Problems with electrical power- during most rain storms power goes out
school system/ education
Small-minded school leaders-not board- teachers. Lack of integration. Lack of arts/culture education
no shopping, poor education system
Education system is dragging us down. Empty store fronts recently
no liquor sales on Sunday, insufficient jobs for the population

Nowhere to shop
No answer
Education system
lack of viable job/work/business opportunities, especially for young families
school system-totally dysfunctional; poor land use planning
school system
no jobs, poor school
Our public school system needs help
some/most of elected leaders. Poor leadership in school system. Inability of local government officials to enforce existing codes and ordinances

October 24<sup>th</sup> Responses:

There are not enough service oriented businesses here
Jefferson County does not have any entertainment for the youth and grown-ups
Jobs, wages, and industry
At this present time Jefferson County doesn't offer very many job opportunities due to a lack of business in this area.
I dislike the lack of job growth and the lack of social services for the youth
Racial tensions
I dislike the fact that we are so divided in our races/cultures
It is not a place for people to shop or to work, need more factories for work
Here didn't leave because of family wise. People with different attitudes
no business
economy
it basically doesn't offer any of the other issues above in any measurable quantity
need to enhance all the other issues
no way to get around to the doctor for older people or to grocery shopping
not enough shopping, jobs, industry
no jobs, no business expansions
no growth for economic development
I don't dislike anything
everything, because there is nothing to do
how small it is, lack of public areas like swimming pools, no wal-mart, school is not good (very group)
not enough jobs
The courthouse in Monticello
No jobs, no where to shop
jobs and income
no changes- must move on
access to rivers, southern end of the county is hard to travel by Automobile- needs ATV access

getting voice heard- decisions made by few. Ideas not open for discussion. Look what is best for community not just a few
state of school system, racism

#### **Question 14: What type of place would you like Jefferson County to be in 50 years?**

October 18<sup>th</sup> Responses:

supportive, thriving community
Safe, secure, prosperous
The Same
Small quaint town - historical town
Rural friendly and economically growing community
Same with little more access to restaurants & activities
Rural, affluent, safe, and quaint
Similar to today with increased population and vibrant businesses in the cities/villages.
better schools and better work force to lure better housing, commercial growth. Clean industries
A place that has more job opportunities while maintaining responsive, smart growth
Well balanced - economic sustainability & preserved environment; better racially integrated & single sense of community; An "A" school system; An excellent road network, city bypass, first class county services, work & live in county; be the place where people want to live!
Different than other cities with strip malls and no character; similar to as it is now in terms of character
The same as it is, a rural atmosphere. Wildlife, don't want it to look like Miami
If we are still here we will be advanced mirror imaging the country at the time
Thriving. Business growth. Better schools. Opera house improved and expanded
Medium to high income desirable historic place to live
vibrant- alive- beautiful- peaceful - safe
bigger, more dense but still with a small town feel
great schools/ great businesses
like Thomasville
grow with historic preservation
just like it is now
more activities, more growth while keeping charm of town, better recreational facilities, bikes, paddling, boating
rural, agricultural, a place my family has roots
Best county in Florida with leadership in jobs in the areas of technology, education, and healthcare. We could also be the leader in energy with abundance of natural resources we

have. A lifestyle which is close to nature with modern amenities.
hustling/bustling small town. Shops of antiques, specialties with sights marketable to nation.
better shopping and education system
Much as it is now except improved in education and opportunities for young people
No answer
much like it is now with more jobs, better schools
family oriented with diverse shopping
No answer
educated and diverse
still have the look and feel of a rural community but with a more vibrant economy
No answer
sustainable community similar to today
same rural area- but developed. Cluster area
much like is now but with jobs so young people can stay here. We need industry
Friendly. Rural atmosphere. Effective government leadership and enforcement of applicable codes and ordinances. Clean, clean, clean environment and downtown area. Clean rural roads. Preserved historic places.

#### October 24<sup>th</sup> Responses:

A small town that is self-sustaining so we don't have to drive to Thomasville or Tallahassee
Industry, jobs, education
I would like to see the county grow and expand with more business establishments. This will provide the residents within the county with employment opportunities.
I would like for Jefferson County to be economically booming. With jobs and outstanding leaders with business, schools, public facilities, a state of the art youth program and housing for every aspect of the community
Small town, planned communities, no sprawl
A place where you will have no problem to shop, work, and live. Transportation for people without any
A place where everyone will be more friendly and get along together.
recreation, business, transportation
a small contained city
a small self contained city
more transportation for people to get around town like busses to go around town. Also more jobs for people to work
small, but more diverse
better education, more jobs, better housing, more street lights, better social services
a place with jobs and a thriving economy
I am not really sure

huge, gigantic place with pools, theme parks and fun stuff
One whole community instead of different groups and gangs. World peace in the county
Just like Thomasville and Tallahassee
more jobs and places to shop
city, country, living with a purpose
suburban Leon County
basically the same by cater more to residents than tourists
rural with class. Nice shops. Jobs and a new school system
natural, rural, nice place to live and work and raise a family with a quality education

**Question 15: What are the top three things that need to happen to make Jefferson County into the place that you just described?**

October 18<sup>th</sup> Responses:

jobs (high wage, high need)	schools (community of one)	controlled planning (placement of business, industry, residence)
Good school system	Successful businesses	Good, progressive community and business leadership
Protect the Wacissa River	Protect the Environment	Save the Historic sites
People get involved and care about the decision about the county		
Jobs - well paying	Good school system	Economic development, being welcome to change & growth. More welcoming to "new comers" - less resistance to change from "old ways"
More businesses	Additional shopping and entertainment	
Revamp school system - a school will bring more affluent families	Interesting businesses - small, locally run unique shops	
Improved economic climate nation/worldwide		
School improvement	Need clean industries	
Better economic development and planning	Better schools	Better transportation
Business: Bring in a complete mix of business from several different	Education system & quality of life: replace grammar, middle, and high school staff	Presentation: develop parks & facilities to exploit with protection of key water and

industry sectors	from board to clerks and teachers; health care improvement & education for seniors and technical training for youth	nature features, historical building preservation
Prevention of strip mall and unattractive development	Development of unique economy for job development	Protection and promotion of natural resources for recreation
Stronger regulations to keep property from over-development commercially	Choose development that is environmentally safe and in keeping with atmosphere	Emphasis on education
Better economy	more innovation	less jealousy
Better schools or dissolve current school district.	A few larger businesses to employ 200-300 people. Expendable income would allow small stores to thrive.	someone needs to develop our trails and tourism.
Good schools	Better services: health/stores/food	historic preservation
infrastructure	attitude of property owners	business
improve our education system. Aggressively seek new industries/business.	Create affordable housing. Create a vibrant downtown	Create a healthy city
plan	plan	plan
school improvement	small business growth	good leadership
strong school system	job growth	business opportunities
preserve our heritage-buildings, etc.	preserve our trees/natural resources	maintain some local businesses
improve public education system	more shops; revitalize downtown Monticello	improve access to recreational facilities
make changes slowly		
Jobs	jobs	education
Collaboration of all leaders in every walk of life, religion, race	great economic development plan	open minds
bring small business opportunities	establish more "things to do"	improve school system
Economic development	drastically improved education system(schools)	Better qualified public officials especially at the school board administration
shopping	Recreation	Education
Improve the school system		
Increased economic activity that allows people to live,	improve land use and zoning that increases choices for a	better educational opportunities for those who

work, shop and play here	variety of new and current residents	can't afford private or home schooling
Better school system	Better land use	public transportation
Better school system	more jobs	improved downtown
school system has to be better	industries and manufacturing are needed	health care is very important
Effective government leadership (county and city)	interaction of different groups (racially and economically)	jobs- non service industry
jobs (high wage, high need)	schools (community of one)	controlled planning (placement of business, industry, residence)
Good school system	Successful businesses	Good, progressive community and business leadership

October 24<sup>th</sup> Responses:

Careful economic development	Improve the public schools	Careful land use development
More jobs	Shopping areas/less Dollar Generals and Auto Parts stores	Fun attractions for the youth (skating rinks or bowling areas)
Industry	Jobs	Wages
Increase in small business	More community involvement to aid in getting small businesses	
Open minds to new ideas and ways - (A vision by leaders)	Finances for expansions	Community support (knowledge)
Better schools	Economic development	Less racial tensions
More unity among our races/cultures	Jobs for those who need/want one	
More jobs and better transportation for the needy people	More shopping places to shop	Place where you can go and have a better entertainment like movie theater, bowling, and skating
Transportation	Jobs/Industries	Better education
business - education	affordable housing - transportation	recreation and entertainment
change of generation	business	job opportunity
employment at home	business expansion	better educational programs
employment at home	business expansion	better education

have the busses come back. Bring more jobs here	take down all these old houses that no one lives in	clean up these old lots
create more jobs		
better education	more jobs	more and better health care
a change in local government	include everyone in decision making regardless of race, creed, color, or handicap	invite industries ro come into the county
more money	larger population	better community/society
more community activities	a wal-mart	a better school
more shopping	better homes	
more school	more stores	YMCA
jobs	more places to shop	more interaction among the races
jobs	friends	relatives (common goals/football)
farm to market pared	stores in downtown area	recreation centers for youth
growing job opportunities	enhanced educational opportunities	population and business growth
designate ATV and river access	improve townships with sidewalks	bring businesses for locals to work at
fix public education system	create an environment that will encourage people from other areas to visit and spend their money	

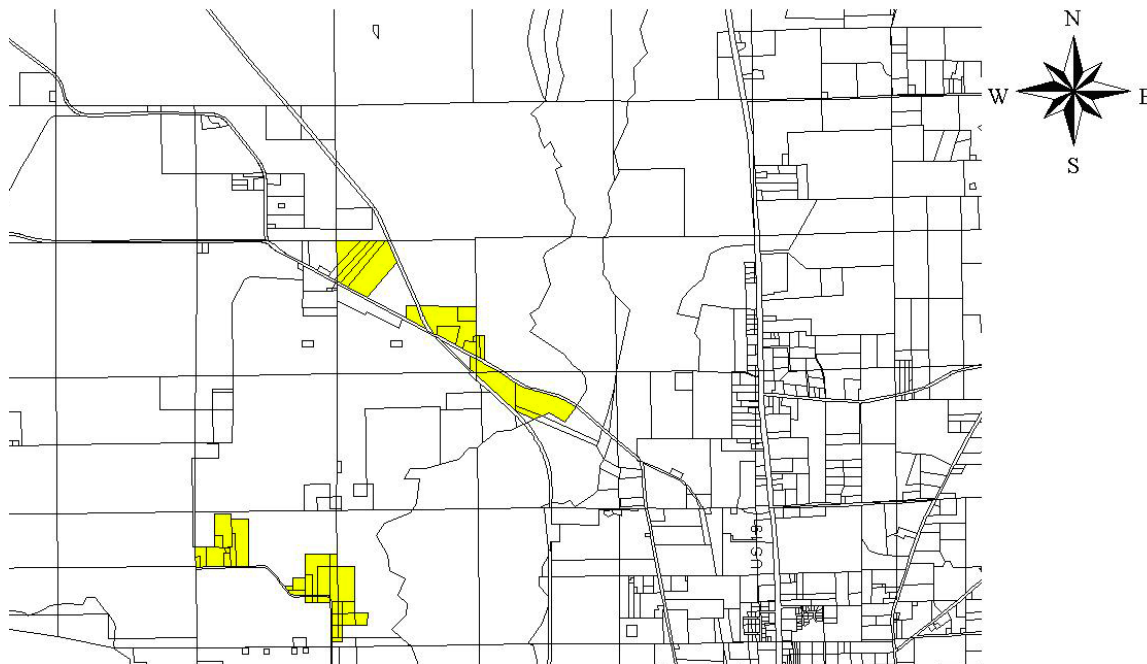
# **Appendix E**

## *Cost Calculation for Future Land Use Amendment*

## Appendix G: Cost Calculation for Future Land Use Amendment

### Example: Lake Miccosukee Map Amendment

The Planning department in Jefferson County recently completed the 2011 Comprehensive Plan EAR Text and FLUM Amendments. There were six map amendments that were voted on separately. They were later submitted to the Department of Community Affairs as a revised Comprehensive Plan document with a revised Future Lane Use Map. One of the adopted FLUM changes, Lake Miccosukee Map Amendment 2011-03 shown in *Appendix Figure G.1*, was a 242.5 acre land use change from Agriculture (AG) 20 to Agriculture (AG) 5. AG 20 is defined as new residential development not exceeding one unit per 20 acres and AG 5 is defined as density for residential use not exceeding one unit per five acres. The change in land use to AG 5 allows a total of 49 units on these 242.5 acres – a 37 unit increase from the former land use of 12 units in AG 20. These additional 37 units will require additional services provided by the County. Below is an analysis of the specific increased needs for the Lake Miccosukee Map Amendment 2011-03.



*Appendix Figure G.1. Lake Miccosukee Map Amendment 2011-03*

*Source: Comprehensive Plan 2025 Jefferson County Florida*

### *Traffic Generation*

The increase in 37 units, when fully built out, would approximately generate 56 trips during the weekday peak hour. This is an increase of 40 trips with the AG 5 land use change from the former AG 20 with 16 trips (*see traffic methodology*). The two main roads that would see this increase would be West Lake Road and Lake Road, also known as County Road 142. Based on the Traffic Circulation Level of Service Standards found in the County's Comprehensive Plan, W. Lake Road is considered a "Local Paved Road" with a level of service standard of "C" and Lake Road is considered a "County Collector" with a level of service standard of "D". The increase in trips generated by this land use change would create more demand on an already low standard of service.

### *Public School System*

The public school system would see an increase in demand assuming all of the 37 units were completely build out. The AG 5 land use change would create a demand of approximately nine students, an increase of seven students from the former AG 20 land use of two students (*see school methodology*). When applying these additional seven students at a cost of \$7,994 per pupil, it would create a funding need of \$55,958 for these students. A small public school system is directly affected by increases in student population due to limited staff and resources. Additional teachers and support staff may need to be hired by the district, and busing services may need to be expanded to service these rural areas.

### *Water/Sewer/ Solid Waste Infrastructure*

The biggest expense to a local government would be in the expansion of water and sewerage services, outside of an urban service area. For this Map Amendment, the Jefferson Communities Water system, a private company, is responsible for all unincorporated areas outside of the urban service area. At this time, residents outside of the urban service area do not have to connect to the water system if it is in close proximity. The Jefferson

Communities Water system would have to expand its services over nine miles to provide coverage to the northern parcels of the land use change. This scenario seems unlikely since the Jefferson Communities Water system is primarily south of Monticello, and if the infrastructure was extended residents would not be required to connect to it. In relation to the urban service area, the northern parcels are approximately 3 miles away and the southern parcels are approximately 3.5 miles away. Unless the urban service area expanded, a private well would be the only alternative for these residents to have access to water.

At this time, there is no sewage system in place for unincorporated residents outside of the urban service area, so those residents must rely on septic tanks. As mentioned above, the northern parcels are approximately 3 miles away and the southern parcels are approximately 3.5 miles away from the urban service area. The only option for the residents of this land use change would be a private septic tank. In addition, these parcels are not provided curbside trash pickup. These residents would have to rely on garbage and recycling dumpster sites located around the County, operated by the Jefferson County Solid Waste.

### *Environmental*

The closest parcels in this land use change to Lake Miccosukee are less than two miles away. The main environmental concern is that by allowing a higher density land use change, new opportunities arise for pollution of Lake Miccosukee due to the increase in private sewage tanks. These private sewage tanks are the only alternative for residents when developing on these parcels without an expansion of the Monticello urban services area. The water in Lake Miccosukee is the actual surface water of the Floridan Aquifer, the largest aquifer in the Southeastern United States. This is cause for concern as nearly all of Florida uses this aquifer for drinking water.

## *Conclusion*

The Lake Miccosukee Map Amendment exercise is an attempt to show how a specific land use change can affect the local government of Jefferson County and the community as a whole. The collective combination of FLUM Amendment changes over time enables sprawl to occur and creates a long-term problem for the county. The infrastructure system costs will increase by allowing land use changes in a haphazard manor. In this specific land use change example, the peak hour weekday trip generation may only increase by 40 trips from this 242.5 acre change but over time the series of land use changes will add up to lower the level of service standards. The demand on other infrastructure systems such as schools and solid waste will grow. By allowing higher density development in the county's rural areas, the county increases threats to pristine environmental resources such as Lake Miccosukee. Such conversions also encourage the premature conversion of farmland into suburbia, undermining the county's rural character.

## ***Methodology***

### *Potential Development Impact*

The total build out of the AG 5 and AG 20 were based on the total acres of 242.5 divided by the corresponding density, five or 20. The AG 5 ( $242.5/5=49$ ) calculated to 49 total units and AG 20 ( $242.5/20=12$ ) calculated to 12 total units.

### *Traffic Generation*

The weekday peak hour trips trip calculation was based on the fitted curve equation of  $\ln(T) = 0.90 \ln(X) + 0.53$ . This equation is used to calculate single-family detached housing peak hour weekday trip generation. The AG 5 peak hour weekday trip generation is calculated as  $56 = 0.09 \ln(49) + 0.53$ , where 56 trips are generated. The AG 20 peak hour weekday trip generation is calculated as  $16 = 0.09 \ln(12) + 0.53$ , where 6 trips are

generated. The difference between the two ( $56 - 16 = 40$ ) of 40 is the increase in peak hour traffic generated based on the land use change.

### *Public School System*

First the ratio of the public school students to total population was used, based on 2010 data. The total number of public school students was divided by the total population ( $1,104/14,761 = .07$ ) to generate a ratio of .07.

For the AG 5 school population, the 49 total units were multiplied by the average household size in 2010 ( $49 \times 2.49 = 122$ ) to generate 122 people, the total number of people that occupy the 49 units. The .07 ratio was multiplied by the 122 population ( $.07 \times 122 = 9$ ) to generate 9 students, the total number of students.

For the AG 20 school population, the same technique was applied as above. The 12 total units were multiplied by the average household size in 2010 ( $12 \times 2.49 = 30$ ) to generate 30, the total number of people that occupy the 12 units. The .07 ratio was multiplied by the 30 population ( $.07 \times 30 = 2$ ) to generate two students, the total number of students. The two students from the AG 20 land use were subtracted from the nine students, the new land use, ( $9 - 2 = 7$ ) to generate seven students, the total increase in students based on the land use change.

For the total cost of the seven students to the school system, the seven students were multiplied to the spending per student of \$7,994 in 2010 ( $7 \times \$7,994 = \$55,958$ ) to generate \$55,958, the total spending on the seven students.

# **Appendix E**

*Visual Preference Survey*

*Images and Result*



Transit 19

Combined	Rank:	1
	Score:	4.103
Opera House	Rank:	6
	Score:	4.098
Church	Rank:	8
	Score:	4.108



Parks & Rec 17

Combined	Rank:	2
	Score:	4.103
Opera House	Rank:	7
	Score:	4.049
Church	Rank:	7
	Score:	4.162



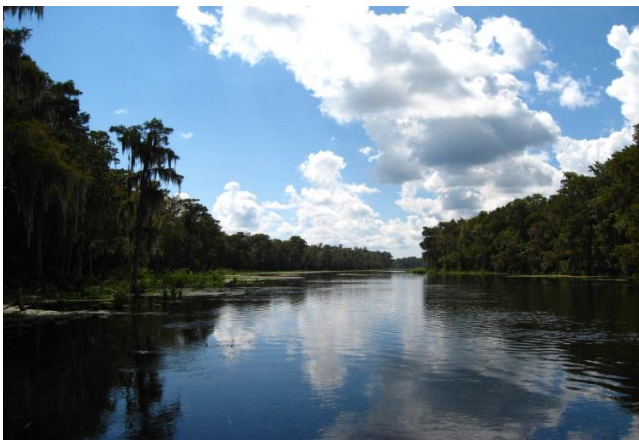
Parks & Rec 3

Combined	Rank:	3
	Score:	4.051
Opera House	Rank:	5
	Score:	4.146
Church	Rank:	10
	Score:	3.946



Buildings 11

Combined	Rank:	4
	Score:	4.038
Opera House	Rank:	11
	Score:	3.854
Church	Rank:	4
	Score:	4.243



Ag & NR 9

Combined	Rank:	5
	Score:	3.923
Opera House	Rank:	4
	Score:	4.341
Church	Rank:	29
	Score:	3.459



Buildings 16

Combined	Rank:	6
	Score:	3.872
Opera House	Rank:	2
	Score:	4.537
Church	Rank:	36
	Score:	3.135



Buildings 4

Combined	Rank:	7
	Score:	3.833
Opera House	Rank:	1
	Score:	4.585
Church	Rank:	48
	Score:	3.000



Parks & Rec 1

Combined	Rank:	8
	Score:	3.821
Opera House	Rank:	19
	Score:	3.512
Church	Rank:	6
	Score:	4.162



Parks & Rec 2

Combined	Rank:	9
	Score:	3.769
Opera House	Rank:	32
	Score:	3.000
Church	Rank:	1
	Score:	4.622



Residential 14

Combined	Rank:	10
	Score:	3.628
Opera House	Rank:	16
	Score:	3.634
Church	Rank:	22
	Score:	3.622



Residential 16

Combined	Rank:	11
	Score:	3.577
Opera House	Rank:	28
	Score:	3.098
Church	Rank:	9
	Score:	4.108



Buildings 18

Combined	Rank:	12
	Score:	3.538
Opera House	Rank:	35
	Score:	2.878
Church	Rank:	2
	Score:	4.270



Buildings 1

Combined	Rank:	13
	Score:	3.513
Opera House	Rank:	21
	Score:	3.390
Church	Rank:	21
	Score:	3.649



Ag & NR 21

Combined	Rank:	14
	Score:	3.500
Opera House	Rank:	20
	Score:	3.512
Church	Rank:	28
	Score:	3.486



Parks & Rec 14

Combined	Rank:	15
	Score:	3.462
Opera House	Rank:	3
	Score:	4.366
Church	Rank:	73
	Score:	2.459



Buildings 13

Combined	Rank:	16
	Score:	3.449
Opera House	Rank:	9
	Score:	3.976
Church	Rank:	58
	Score:	2.865



Parks & Rec 6

Combined	Rank:	17
	Score:	3.423
Opera House	Rank:	33
	Score:	2.976
Church	Rank:	12
	Score:	3.919



Parks & Rec 13

Combined	Rank:	18
	Score:	3.423
Opera House	Rank:	14
	Score:	3.683
Church	Rank:	37
	Score:	3.135



Transit 1

Combined	Rank:	19
	Score:	3.385
Opera House	Rank:	29
	Score:	3.073
Church	Rank:	17
	Score:	3.730



Parks & Rec 16

Combined	Rank:	20
	Score:	3.385
Opera House	Rank:	8
	Score:	4.024
Church	Rank:	66
	Score:	2.676



Buildings 10

Combined	Rank:	21
	Score:	3.372
Opera House	Rank:	13
	Score:	3.683
Church	Rank:	44
	Score:	3.027



Residential 6

Combined	Rank:	22
	Score:	3.372
Opera House	Rank:	30
	Score:	3.073
Church	Rank:	20
	Score:	3.703



Saunders 2

Combined	Rank:	23
	Score:	3.372
Opera House	Rank:	34
	Score:	2.951
Church	Rank:	16
	Score:	3.838



Ag & NR 8

Combined	Rank:	24
	Score:	3.333
Opera House	Rank:	12
	Score:	3.756
Church	Rank:	57
	Score:	2.865



Ag & NR 2

Combined	Rank:	25
	Score:	3.308
Opera House	Rank:	24
	Score:	3.244
Church	Rank:	31
	Score:	3.378



Transit 2

Combined	Rank:	26
	Score:	3.218
Opera House	Rank:	15
	Score:	3.659
Church	Rank:	62
	Score:	2.730



Ag & NR 3

Combined	Rank:	27
	Score:	3.179
Opera House	Rank:	10
	Score:	3.878
Church	Rank:	74
	Score:	2.405



Buildings 7

Combined	Rank:	28
	Score:	3.167
Opera House	Rank:	48
	Score:	2.244
Church	Rank:	5
	Score:	4.189



Transit 4

Combined	Rank:	29
	Score:	3.141
Opera House	Rank:	46
	Score:	2.439
Church	Rank:	11
	Score:	3.919



Combined	Rank:	30
	Score:	3.077
Opera House	Rank:	27
	Score:	3.098
Church	Rank:	42
	Score:	3.054



Ag & NR 16

Combined	Rank:	31
	Score:	2.987
Opera House	Rank:	31
	Score:	3.000
Church	Rank:	49
	Score:	2.973



Parks & Rec 24

Combined	Rank:	32
	Score:	2.962
Opera House	Rank:	45
	Score:	2.463
Church	Rank:	26
	Score:	3.514



Parks & Rec 7

Combined	Rank:	33
	Score:	2.949
Opera House	Rank:	59
	Score:	1.756
Church	Rank:	3
	Score:	4.270



Ag & NR 10

Combined	Rank:	34
	Score:	2.910
Opera House	Rank:	22
	Score:	3.293
Church	Rank:	71
	Score:	2.486



Residential 11

Combined	Rank:	35
	Score:	2.910
Opera House	Rank:	47
	Score:	2.268
Church	Rank:	23
	Score:	3.622



Transit 11

Combined	Rank:	36
	Score:	2.897
Opera House	Rank:	49
	Score:	2.146
Church	Rank:	18
	Score:	3.730



Transit 9

Combined	Rank:	37
	Score:	2.846
Opera House	Rank:	26
	Score:	3.122
Church	Rank:	69
	Score:	2.541



Saunders 6

Combined	Rank:	38
	Score:	2.833
Opera House	Rank:	41
	Score:	2.659
Church	Rank:	45
	Score:	3.027



Ag & NR 15

Combined	Rank:	39
	Score:	2.821
Opera House	Rank:	25
	Score:	3.146
Church	Rank:	72
	Score:	2.459



Ag & NR 1

Combined	Rank:	40
	Score:	2.769
Opera House	Rank:	17
	Score:	3.585
Church	Rank:	87
	Score:	1.865



Saunders 4

Combined	Rank:	41
	Score:	2.756
Opera House	Rank:	50
	Score:	2.073
Church	Rank:	25
	Score:	3.514



Saunders 1

Combined	Rank:	42
	Score:	2.744
Opera House	Rank:	40
	Score:	2.707
Church	Rank:	60
	Score:	2.784



Residential 15

Combined	Rank:	43
	Score:	2.705
Opera House	Rank:	39
	Score:	2.732
Church	Rank:	65
	Score:	2.676



Parks & Rec 18

Combined	Rank:	44
	Score:	2.692
Opera House	Rank:	54
	Score:	1.878
Church	Rank:	24
	Score:	3.595



Parks & Rec 12

Combined	Rank:	45
	Score:	2.692
Opera House	Rank:	44
	Score:	2.488
Church	Rank:	53
	Score:	2.919



Transit 14

Combined	Rank:	46
	Score:	2.667
Opera House	Rank:	18
	Score:	3.512
Church	Rank:	90
	Score:	1.730



Saunders 9

Combined	Rank:	47
	Score:	2.667
Opera House	Rank:	61
	Score:	1.707
Church	Rank:	19
	Score:	3.730



Parks & Rec 8

Combined	Rank:	48
	Score:	2.628
Opera House	Rank:	23
	Score:	3.244
Church	Rank:	85
	Score:	1.946



Buildings 30

Combined	Rank:	49
	Score:	2.603
Opera House	Rank:	37
	Score:	2.780
Church	Rank:	76
	Score:	2.405



Residential 21

Combined	Rank:	50
	Score:	2.551
Opera House	Rank:	65
	Score:	1.317
Church	Rank:	13
	Score:	3.919



Parks & Rec 4

Combined	Rank:	51
	Score:	2.526
Opera House	Rank:	53
	Score:	2.000
Church	Rank:	40
	Score:	3.108



Buildings 14

Combined	Rank:	52
	Score:	2.474
Opera House	Rank:	67
	Score:	1.195
Church	Rank:	14
	Score:	3.892



Saunders 8

Combined	Rank:	53
	Score:	2.462
Opera House	Rank:	51
	Score:	2.049
Church	Rank:	51
	Score:	2.919



Transit 8

Combined	Rank:	54
	Score:	2.449
Opera House	Rank:	60
	Score:	1.707
Church	Rank:	32
	Score:	3.270



Residential 7

Combined	Rank:	55
	Score:	2.423
Opera House	Rank:	57
	Score:	1.805
Church	Rank:	38
	Score:	3.108



Ag & NR 18

Combined	Rank:	56
	Score:	2.333
Opera House	Rank:	42
	Score:	2.634
Church	Rank:	83
	Score:	2.000



Buildings 25

Combined	Rank:	57
	Score:	2.295
Opera House	Rank:	38
	Score:	2.756
Church	Rank:	89
	Score:	1.784



Buildings 9

Combined	Rank:	58
	Score:	2.295
Opera House	Rank:	72
	Score:	0.878
Church	Rank:	15
	Score:	3.865



Ag & NR 12

Combined	Rank:	59
	Score:	2.282
Opera House	Rank:	52
	Score:	2.024
Church	Rank:	68
	Score:	2.568



Transit 12

Combined	Rank:	60
	Score:	2.218
Opera House	Rank:	58
	Score:	1.780
Church	Rank:	63
	Score:	2.703



Ag & NR 7

Combined	Rank:	61
	Score:	2.103
Opera House	Rank:	62
	Score:	1.585
Church	Rank:	64
	Score:	2.676



Saunders 5

Combined	Rank:	62
	Score:	2.103
Opera House	Rank:	68
	Score:	1.195
Church	Rank:	41
	Score:	3.108



Residential 8

Combined	Rank:	63
	Score:	2.090
Opera House	Rank:	56
	Score:	1.854
Church	Rank:	79
	Score:	2.351



Residential 12

Combined	Rank:	64
	Score:	2.064
Opera House	Rank:	75
	Score:	0.780
Church	Rank:	27
	Score:	3.486



Saunders 3

Combined	Rank:	65
	Score:	2.038
Opera House	Rank:	64
	Score:	1.390
Church	Rank:	61
	Score:	2.757



Residential 4

Combined	Rank:	66
	Score:	2.000
Opera House	Rank:	76
	Score:	0.732
Church	Rank:	30
	Score:	3.405



Buildings 27

Combined	Rank:	67
	Score:	1.987
Opera House	Rank:	70
	Score:	0.976
Church	Rank:	39
	Score:	3.108



Buildings 29

Combined	Rank:	68
	Score:	1.987
Opera House	Rank:	63
	Score:	1.512
Church	Rank:	70
	Score:	2.514



Buildings 5

Combined	Rank:	69
	Score:	1.936
Opera House	Rank:	36
	Score:	2.805
Church	Rank:	96
	Score:	0.973



Buildings 3

Combined	Rank:	70
	Score:	1.897
Opera House	Rank:	71
	Score:	0.902
Church	Rank:	47
	Score:	3.000



Saunders 7

Combined	Rank:	71
	Score:	1.808
Opera House	Rank:	73
	Score:	0.854
Church	Rank:	59
	Score:	2.865



Buildings 15

Combined	Rank:	72
	Score:	1.769
Opera House	Rank:	66
	Score:	1.195
Church	Rank:	75
	Score:	2.405



Transit 22

Combined	Rank:	73
	Score:	1.679
Opera House	Rank:	80
	Score:	0.244
Church	Rank:	33
	Score:	3.270



Ag & NR 11

Combined	Rank:	74
	Score:	1.654
Opera House	Rank:	55
	Score:	1.878
Church	Rank:	91
	Score:	1.405



Residential 3

Combined	Rank:	75
	Score:	1.564
Opera House	Rank:	78
	Score:	0.341
Church	Rank:	55
	Score:	2.919



Ag & NR 6

Combined	Rank:	76
	Score:	1.551
Opera House	Rank:	43
	Score:	2.585
Church	Rank:	97
	Score:	0.405



Ag & NR 5

Combined	Rank:	77
	Score:	1.462
Opera House	Rank:	69
	Score:	1.073
Church	Rank:	86
	Score:	1.892



Ag & NR 20

Combined	Rank:	78
	Score:	1.449
Opera House	Rank:	74
	Score:	0.829
Church	Rank:	81
	Score:	2.135



Residential 17

Combined	Rank:	79
	Score:	1.423
Opera House	Rank:	84
	Score:	-0.244
Church	Rank:	34
	Score:	3.270



Residential 13

Combined	Rank:	80
	Score:	1.346
Opera House	Rank:	82
	Score:	-0.073
Church	Rank:	52
	Score:	2.919



Parks & Rec 9

Combined	Rank:	81
	Score:	1.282
Opera House	Rank:	77
	Score:	0.683
Church	Rank:	84
	Score:	1.946



Residential 22

Combined	Rank:	82
	Score:	1.244
Opera House	Rank:	79
	Score:	0.293
Church	Rank:	80
	Score:	2.297



Buildings 8

Combined	Rank:	83
	Score:	1.179
Opera House	Rank:	89
	Score:	-0.610
Church	Rank:	35
	Score:	3.162



Residential 24

Combined	Rank:	84
	Score:	1.154
Opera House	Rank:	87
	Score:	-0.463
Church	Rank:	50
	Score:	2.946



Residential 1

Combined	Rank:	85
	Score:	1.077
Opera House	Rank:	88
	Score:	-0.561
Church	Rank:	56
	Score:	2.892



Buildings 17

Combined	Rank:	86
	Score:	0.962
Opera House	Rank:	90
	Score:	-0.805
Church	Rank:	54
	Score:	2.919



Buildings 21

Combined	Rank:	87
	Score:	0.936
Opera House	Rank:	92
	Score:	-0.976
Church	Rank:	43
	Score:	3.054



Residential 9

Combined	Rank:	88
	Score:	0.756
Opera House	Rank:	91
	Score:	-0.927
Church	Rank:	67
	Score:	2.622



Transit 21

Combined	Rank:	89
	Score:	0.731
Opera House	Rank:	83
	Score:	-0.220
Church	Rank:	88
	Score:	1.784



Ag & NR 14

Combined	Rank:	90
	Score:	0.628
Opera House	Rank:	81
	Score:	0.049
Church	Rank:	94
	Score:	1.270



Residential 5

Combined	Rank:	91
	Score:	0.500
Opera House	Rank:	93
	Score:	-1.220
Church	Rank:	77
	Score:	2.405



Residential 23

Combined	Rank:	92
	Score:	0.462
Opera House	Rank:	95
	Score:	-1.268
Church	Rank:	78
	Score:	2.378



Buildings 22

Combined	Rank:	93
	Score:	0.436
Opera House	Rank:	99
	Score:	-1.902
Church	Rank:	46
	Score:	3.027



Residential 26

Combined	Rank:	94
	Score:	0.244
Opera House	Rank:	96
	Score:	-1.415
Church	Rank:	82
	Score:	2.081



Buildings 20

Combined	Rank:	95
	Score:	-0.179
Opera House	Rank:	97
	Score:	-1.537
Church	Rank:	92
	Score:	1.324



Buildings 23

Combined	Rank:	96
	Score:	-0.282
Opera House	Rank:	95
	Score:	-1.268
Church	Rank:	99
	Score:	-0.108



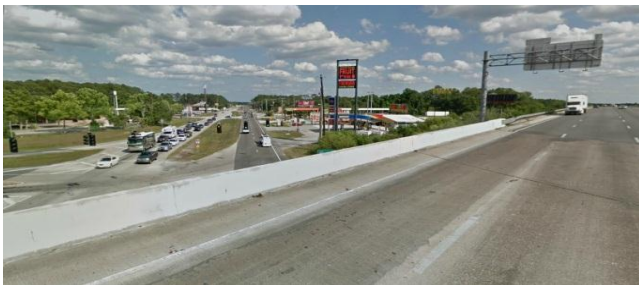
Transit 20

Combined	Rank:	97
	Score:	-0.333
Opera House	Rank:	98
	Score:	-1.585
Church	Rank:	95
	Score:	1.054



Buildings 12

Combined	Rank:	98
	Score:	-0.577
Opera House	Rank:	94
	Score:	-1.220
Church	Rank:	98
	Score:	0.135



Transit 17

Combined	Rank:	99
	Score:	-0.679
Opera House	Rank:	101
	Score:	-2.488
Church	Rank:	93
	Score:	1.324



Ag & NR 4

Combined	Rank:	100
	Score:	-0.833
Opera House	Rank:	85
	Score:	-0.341
Church	Rank:	100
	Score:	-1.378



Residential 10

Combined	Rank:	101
	Score:	-2.000
Opera House	Rank:	100
	Score:	-1.927
Church	Rank:	102
	Score:	-2.081



Buildings 24

Combined	Rank:	102
	Score:	-2.462
Opera House	Rank:	102
	Score:	-3.146
Church	Rank:	101
	Score:	-1.703



Buildings 26

Combined	Rank:	103
	Score:	-3.218
Opera House	Rank:	104
	Score:	-4.024
Church	Rank:	103
	Score:	-2.324



Ag & NR 19

Combined	Rank:	104
	Score:	-3.795
Opera House	Rank:	103
	Score:	-3.683
Church	Rank:	104
	Score:	-3.919

# **Appendix G**

*Residents/Individuals Interviewed by Jefferson  
County Studio*

**Residents/Individuals Interviewed by Jefferson County Studio**

Ana-Marie (Monticello Opera House)

Betsy Barfield (Jefferson County Commissioner)

Dr. George Cole (Jefferson County Resident/Served on Planning Commission)

Neil Fleckenstein (Tall Timbers Research Station & Land Conservancy)

Angela Gray (Jefferson County Property Appraiser)

Lola Hightower (Jefferson County Housing Liaison)

David Hobbs (Jefferson County Sheriff)

Melanie Mays (Chamber of Commerce)

C.P. Miller (Resident/Planning Commission Member)

Corwin Padget (Planning Commission Vice-Chair)

Idella Scott (City Councilwoman)

Margie Stern (Main Street Monticello)

Bill Tellefsen (Head Planner, Jefferson County Planning Department)

Stephen Walker (Resident/Walker Farms)

Mr. Warrick (Lifetime Jefferson County Resident/Library Genealogist)

# **Appendix H**

*FDOT Monticello By-Pass*

*2005 Corridor Study*

FLORIDA  
DEPARTMENT OF TRANSPORTATION  
DISTRICT 3

CHIPLEY, FLORIDA

**CORRIDOR REPORT**

**State Road 57 (US 19)  
Monticello By-Pass**

From South of CR 158  
To North of CR 149

In Jefferson County



Financial Project ID No: 413882-1-22-01

January, 2005

Prepared By:



In Association With:



*Michael E. Schwier* 01/26/05

Michael E. Schwier, PE  
PE No. 53948  
THE LPA GROUP, INCORPORATED  
2252 Killearn Center Boulevard  
Tallahassee, Florida 32309  
(850) 205-0460 C.A. #4307

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## 1.0 SUMMARY

This report documents the Corridor Study for SR 57 (US 19) from south of CR 158 to north of CR 159, also known as the Monticello By-Pass. Conducted by the Florida Department of Transportation and completed in early 2005, this study represents Stage 1 of a two-part study process. The analysis conducted for Stage 1 involved the development and evaluation of a wide array of potential transportation improvement alternatives, which include:

- Geometric and Operational Improvements to the Existing Corridor,
- Capacity Improvements to the Existing Corridor
- Off-System Alternatives (improving existing facilities parallel to SR 57)
- By-Pass Alternatives
- No Build (Do Nothing)

In support of the alternatives development and evaluation process, extensive coordination with local government, agencies and elected officials was conducted. A series of public involvement meetings and planning workshops were also held to gain input from local residents and the general public.

Each alternative was evaluated based on its ability to meet the desired level of travel service while minimizing social, economic and environmental impacts. SR 57 (US 19) is part of the Florida Intrastate Highway System (FIHS), and is also designated an Emerging Corridor on the Strategic Intermodal System (SIS) for the State of Florida.

The design criteria associated with the FIHS and SIS designations impose significant restrictions on the roadway geometry. This would essentially require a by-pass along a new alignment in order to maintain consistency with the state's transportation plans. However, future traffic projections do not indicate a deficiency in the level of service on the existing system in the 2030 design year.

The Stage 1 Corridor Study has determined the by-pass alternatives should be carried forward into the Stage 2 PD&E Study. As a potential interim improvement, geometric/operational improvements to the existing facility will also be carried forward for future study in Stage 2.

No commitments have been made by FDOT during the Stage 1 phase.

The Stage 2 evaluation will employ the Project Development and Environment (PD&E) Study process, which meets the requirements of the National Environmental Protection Act (NEPA) and maintains the project's eligibility to receive future federal funding. As of the date of this report, funding for the Stage 2 PD&E Study was not programmed.

## 2.0 INTRODUCTION

### 2.1 PURPOSE

The purpose of the SR 57 (US 19) Monticello By-Pass Project Development and Environment (PD&E) Study is to develop and evaluate potential transportation improvement alternatives that meet the desired level of travel service while minimizing social, economic and environmental impacts. The project limits along SR 57 (US 19) are from south of CR 158 to north of CR 149. The PD&E Study is being conducted in two stages. Stage 1, which is the subject of this report, involves Corridor Study tasks that include documenting project need and existing engineering and environmental conditions within the project limits, evaluating existing and projected travel demand and traffic operations, developing a series of potential transportation improvement alternative corridors and evaluating those alternatives to identify viable corridors which may be advanced into the Stage 2 PD&E Study. Input and involvement from local citizens and public agencies is an important part of the Stage 1 effort. The Stage 2 PD&E Study would include the completion of project documentation and public involvement activities to meet the requirements of the PD&E Manual.

### 2.2 BACKGROUND INFORMATION

The evaluation of an alternate truck route or by-pass around the incorporated limits of the City of Monticello has been a community concern for nearly 30 years. In 1976, the Jefferson County Board of County Commissioners sponsored the *Monticello By-Pass Study*, which was prepared by the University of Florida. In 1989, the Florida Department of Transportation (FDOT) completed the *US 19 Corridor Study*, which evaluated potential transportation improvements along US 19 in Taylor, Madison and Jefferson counties. In 1998, the FDOT completed the *US 19 Action Plan* for Taylor, Madison and Jefferson counties, which documented the need for corridor improvements along US 19 necessary to meet Florida Intrastate Highway System (FIHS) standards in effect at the time of the study. Jefferson County and Monticello are part of the Apalachee Regional Planning Council.

Relative to the concept of an alternate truck route or by-pass around Monticello, these previous studies were generated in part by community issues, concerns and desires to improve operational characteristics in the core downtown Monticello area. These issues, concerns and desires can be summarized as follows:

- Reduce existing and anticipated heavy truck volumes
- Improve safety conditions
- Preserve the small town atmosphere
- Provide economic stability in the core downtown area.

Historically, one of the challenges associated with implementing an alternate

truck route or by-pass around the City of Monticello has been reaching consensus on a viable project alternative that achieves the overall transportation goals and objectives while minimizing, to the greatest extent possible, social, economic and environmental impacts. Another challenge associated with the previous studies was related to the inability to fully document project need based on future travel demand. Over the years, the local community has continued to promote the desire to reduce of truck traffic, enhance safety, provide economic stability and preserve the community characteristic of the downtown area.

In response to this continued community interest, specifically generated by the Jefferson County Chamber of Commerce, the FDOT has undertaken Phase 1 of a formal the Project Development and Environment (PD&E) Study to identify potential transportation improvements that address community concerns. The factors that constitute the need for the proposed improvements include current and projected roadway deficiencies including traffic capacity, congestion and geometric design, safety, consistency with adopted local, state and regional long range transportation plans and growth management plans and socio-economic demand. These factors are discussed below in Section 3. The initiation of the formal PD&E Study will allow FDOT to maintain eligibility for future federal funding for this project, should funds be made available.

## 2.3 PROJECT DESCRIPTION

The SR 57 (US 19) Monticello By-Pass Project Limits are shown on Figure 2-1. SR 57 (US 19) is part of the Florida Intrastate Highway System (FIHS) and has been identified as an emerging corridor on the Strategic Intermodal System (SIS) Plan. Historically, this four-lane divided roadway has been known as the Florida-Georgia Parkway, serving as a major north-south route for local, regional and interstate traffic. In the center of the study corridor, SR 57 (US 19) intersects with a regional east-west route, SR 10 (US 90). The intersection formed by these two roadways is a roundabout that contains the historic Jefferson County Courthouse in its central island. Surrounding the roundabout and courthouse square is the central business district of the City of Monticello.

Although SR 57 (US 19) is typically a four-lane roadway, there is a small section immediately north of the roundabout that is two-lanes with angled on-street parking. The roundabout and two-lane section of SR 57 (US 19) are significant geometric constraints for this heavily traveled corridor. Aside from lane continuity and capacity issues, negotiating the roundabout is a challenge for the considerable number of large trucks utilizing this roadway. Observations during peak periods have documented truck volumes comprising as much as 20% of the traffic on SR 57 (US 19), and 10% of traffic on SR 10 (US 90).

Stage 1 of the PD&E Study evaluates a range of potential options that would improve travel safety and capacity in the area to identify viable alternatives to be carried forward into Stage 2. The alternatives have been divided into the following three classifications according to the nature of the improvements:

- Operational and geometric improvement alternatives that evaluate the potential for access management, traffic operations, enhanced signing and pavement markings and intersection improvements to provide interim capacity and safety improvements along SR 57 (US 19).
- “Corridor-level” concepts for widening the existing SR 57 (US 19) roadway within the project limits and improving the geometry of the existing roundabout.
- “Corridor-level” concepts for alternative roadway corridors or one-way pairs that could help relieve truck conflicts, safety concerns, environmental concerns, capacity concerns resulting from the existing roadway configuration and bring this section of SR 57 (US 19) into compliance with FIHS / SIS standards.

These alternative improvement strategies, along with the “no build” or “do nothing” alternative, are discussed in more detail in Section 7.0 of the report. Improvement alternatives have been evaluated according to a set of evaluation criteria that considers travel service, impacts to natural, social and physical environment conditions and project cost.



### 3.0 NEED FOR IMPROVEMENT

#### 3.1 DEFICIENCIES

Existing and future year travel demand characteristics were developed for the SR 57 (US 19) Monticello By-Pass Corridor Study (Stage I of the PD&E Study). This included an analysis of traffic flow conditions on roadway segments along the SR 57 (US 19) and SR 10 (US 90) corridors and at the roundabout intersection between the two roadways in the center of town. The analyses of existing and future conditions were based on current traffic counts and existing roadway and intersection geometry. The level of service (LOS) was analyzed for roadway segments and for the roundabout intersection of SR 57 (US 19) and SR 10 (US 90). The LOS analysis was conducted for existing conditions and for future conditions (years 2010 and 2030), assuming no capacity improvements to the existing facilities.

Traffic data collected for this project included four (4) seven-day vehicle classification counts, one (1) eight-hour turning movement count and one (1) 48-hour volume count. Existing year (2004) average annual daily traffic (AADT) volumes on SR 57 (US 19) range from 4,300 vehicles per day (vpd) to 10,100 vpd and volumes on SR 10 (US 90) range from 2,500 vpd to 7,900 vpd. By the year 2030, the traffic volumes along SR 57 (US 19) are expected to range from 5,600 vpd to 13,200 vpd and volumes on SR 10 (US 90) range from 3,300 vpd to 10,300 vpd. The percentage of total trucks was approximately 10% on SR 10 (US 90) in both the a.m. and p.m. peaks. On SR 57 (US 19), the percentages were approximately 20% in both the a.m. and p.m. peaks north of Monticello and approximately 15% in the a.m. and 8% in the p.m. peaks south of Monticello.

For all SR 10 (US 90) segments, the adopted LOS standard is C and existing levels of service are A or B, with the exception of the segment from SR 57 (US 19) to Railroad Street, which is at LOS C. For SR 57 (US 19), the LOS standard is B for segments outside the City of Monticello and C for segments inside the city. Existing levels of service are all A, except for the two-lane segment from SR 10 (US 90) to Chestnut Street, which is at LOS C. *All roadway segment levels of service are within the adopted standards for the design year 2030.*

To analyze the operation of the roundabout, an eight-hour turning movement count was conducted at the intersection of SR 57 (US 19) and SR 10 (US 90) and analyzed using the roundabout module in the Highway Capacity Software (HCS 2000) for un-signalized intersections. All calculated existing volume to capacity (v/c) ratios are below 0.85, which is the highest acceptable v/c ratio for a roundabout approach. The existing intersection LOS is therefore acceptable.

The future analysis of the roundabout shows that in 2010, the southbound approach will have a v/c ratio exceeding 0.85 in the a.m. peak, which is in the unacceptable range. The other approaches have ratios below 0.85 in 2010. *In 2030, all four approaches have unacceptable v/c ratios in the am peak and the*

*northbound and southbound approaches are also unacceptable in the mid-day peak.*

In addition to the capacity deficiencies identified above, there are geometric constraints associated with the roundabout that fail to safely accommodate certain over-sized vehicles. Traffic control associated with the roundabout requires City officers to respond an average of 15 times a year to incidents regarding tractor-trailers negotiating the roundabout, traffic accidents, funeral processions and community events such as parades.

### 3.2 SAFETY

Documented crash records for the years 1998 through 2002 indicate a generally low overall level of crash incidents throughout the project limits. The crash analysis does not indicate that there are any high crash segments within the project limits that need to be addressed. A larger safety concern is related to pedestrians in the downtown area and crossing the roundabout to the county Courthouse.

Only one report of a vehicle-pedestrian accident was observed in the study years. An 8-hour pedestrian count conducted in the area of the roundabout indicated that 285 pedestrian crossings were made to or from the Courthouse. Roundabouts are efficient features for moving traffic but they are not recommended for pedestrian movements that are directed to the center of the circle. The relatively high number of pedestrian crossings to the Courthouse as well as the generally high level of pedestrian traffic associated with the businesses in the downtown area combined with the fact that SR 57 (US 19) has 20% truck traffic creates a potentially hazardous situation. Also contributing to the safety concerns for the area is the angled, on-street parking within two blocks of the roundabout. Motorist exiting the roundabout lack the sight-distance to detect vehicles pulling out of the on-street parking. Motorists backing out of the angled parking complain of lack of visibility while backing out of the on-street parking into moving traffic.

### 3.3 CONSISTENCY WITH LOCAL, STATE AND REGIONAL TRANSPORTATION PLANS

The SR 57 (US 19) corridor is listed as an Emerging Corridor in FDOT's Strategic Intermodal System (SIS) and is part of the Florida Intrastate Highway System (FIHS). However, the design, right-of-way acquisition and construction phases for this project are not included in Jefferson County's Comprehensive Plan nor are they listed on FDOT's Five-Year Work Program. The corridor has recently been added to the District's Needs Plan.

### 3.4 SOCIAL AND ECONOMIC DEMAND

SR 57 (US 19) and SR 10 (US 90) are critical links in the regional transportation network serving Jefferson County and the State of Florida. In addition to

providing access to adjacent properties, these corridors provide for the efficient movement of people and goods within the region. The existing land use within the project limits varies from rural undeveloped and agricultural land to a developed central business district with historical significance. Based on the results of previous studies and public perception, project alternatives for this study are expected to have varying levels of impact on and/or benefit to the economic viability of the downtown area and surrounding undeveloped land. These issues will be addressed during the PD&E Study.

## **4.0 EXISTING CONDITIONS**

### **4.1 ROADWAY CHARACTERISTICS**

SR 57 (US 19) has multiple roadway sections along the length of the corridor within the project limits. To aid in the following discussion, the existing SR 57 (US 19) corridor is broken up into seven segments. The seven segments are shown and described in Figure 4-1, Roadway Segment Survey.

#### **4.1.1 Functional Classification**

Based on the FDOT Straight Line Diagrams (SLD), SR 57 (US 19) is classified as a "Rural Principal Arterial – Other" within the project limits. The existing facility is part of the Florida Intrastate Highway System (FIHS). The FIHS is an interconnected statewide system of limited access and controlled access facilities. Additionally, the existing facility is part of FDOT's new Strategic Intermodal System listed as an "Emerging Corridor". The Strategic Intermodal System (SIS) is composed of transportation corridors and facilities of statewide and interregional significance for more efficient movement of both passengers and freight. An Emerging Corridor is defined as a facility of statewide or interregional significance that does not currently meet the criteria and threshold for SIS designation but is expected to experience a growing level of activity. Standards and criteria are not currently available for SIS facilities. Straight Line Diagrams are provided in Appendix A of this report.

#### **4.1.2 Typical Sections**

The existing roadway sections on SR 57 (US 19) vary along the length of the project from a four-lane rural divided highway to a two-lane urban (curb and gutter) roadway. Figures 4-2 through 4-4 detail the various existing typical sections by segment. The typical section shown in Figure 4-2 for Segment 2 reflects recent improvements made during a milling and resurfacing project conducted in 2003. The SLD have not been updated to reflect this improvement.

#### **4.1.3 Posted and Design Speed**

As the typical sections vary so do the posted and design speeds. Posted and design speeds are tabulated in Table 4-1. Posted speeds range from 65 mph in the rural segments to 25 mph in the two-lane segments.

**Table 4-1**  
**Existing Posted & Design Speeds - SR 57 (US 19)**

Segment	Mile Post		Segment Length miles	Description	Design Speed mph	Posted Speed mph	ROW feet	Roadway Section Description
	Begin	End						
1	4.801	8.811	4.010	I-10 to S. City Limits	65	65	200	4 lane divided rural
2	8.811	9.117	0.306	S. City Limits to Cherokee St.	45	35	80	5 lane urban
3	9.117	9.690	0.573	Cherokee St. to Roundabout	35	35	80	4 lane urban w/ parking lanes
4	9.690	9.761	0.071	Roundabout (@ US 90)	15	25	280	Roundabout
5	9.761	9.775	0.014	Roundabout to Pearl St.	25	25	80	2 lane urban w/ diagonal parking
6	9.775	10.230	0.455	Pearl St. to Chestnut St.	30	25	80	2 lane urban
7	10.230	10.869	0.639	Chestnut St. to CR 149	45	45	80	4 lane urban w/ parking lanes
8	10.869			CR 149 north to GA State Line	65	65	200	4 lane divided rural

#### 4.1.4 Railroad Crossing

There is one railroad crossing consisting of twin bridge structures at milepost 6.255. The rail corridor is owned and operated by CSX Transportation. The crossing is a grade-separated with SR 57 (US 19) going over the railroad. The bridge structures are discussed more in the Section 4.2.

#### 4.1.5 Pedestrian, Bicycle and Public Transportation Facilities

Sidewalks are provided for pedestrians from MP 8.811 to MP 10.647. There are no designated bike lanes or wide shoulders for bicycle traffic.

#### 4.1.6 Right-of-Way

The existing right-of-way is 200 feet for the four-lane divided rural sections north and south of Monticello. At all other locations, with the exception of the roundabout, the existing right-of-way width is 80 feet and located at the back of sidewalk. According to the existing plans for the recent milling and resurfacing the right-of-way at the roundabout is located at the back of sidewalk with a total width of 280 feet, at the widest locations.

#### 4.1.7 Horizontal Alignment

The general horizontal alignment of SR 57 (US 19) is a north-south orientation from I-10 to the Georgia state line. The roadway consists of a series of gentle curves connected by long tangents. The delta of the sharpest curve is 1° 56' 00".

#### 4.1.8 Vertical Alignment

The general vertical alignment is composed of a series of gentle vertical curves. These curves are largely located at the southern end of the project limits in the 4-lane divided rural section. The crest vertical curves may not meet current stopping sight distance requirements.

#### 4.1.9 Drainage

Roadside ditches and swales collect the stormwater runoff in the rural segments with no additional treatment provided. Numerous culverts exist along these stretches. Runoff is collected in a curb and gutter system on all other segments of roadway and discharged without treatment.

#### 4.1.10 Geotechnical Data

Jefferson County, located in the eastern part of the Florida panhandle, encompasses a transitional geologic area that separates the thick tertiary carbonate sediment characteristic of the Florida peninsula from the

predominant age-equivalent clastic sediment of western Florida. The geologic area is underlain by thick limestones, dolomites, sands and clays in the northern half of the county.

The two major physiographic divisions in Jefferson County are the Northern Highlands and the Coastal Lowlands. The Northern Highlands extend over the northern two-thirds of the county and the Coastal Lowlands are in the remaining third of Jefferson County. The project is primarily located in the Northern Highlands.

The boundary between the two divisions is a well-defined, southward-facing escarpment, the Cody Scarp. This escarpment is considered to be one of the most persistent topographic breaks in Florida.

The Northern Highlands include a prominent physiographic feature known as the Tallahassee Hills, which lies between the Florida-Georgia state line on the north and the Gulf Coastal Lowlands on the south. The Tallahassee Hills are erosional-remnant hills and ridges that have elevations up to 260 feet. However, a relatively large low area associated with a number of hills is along the eastern side of the county. Although the Tallahassee Hills in this area have been highly dissected by stream erosion and subsurface solution, they probably once represented a nearly flat Miocene delta plain that covered all of northern Jefferson County.

The major soil type within the project limits is classified as Orangeburg-Dothan-Fuquay according to the 1989 Soil Survey of Jefferson County, Florida published by the USDA Soil Conservation Service. Orangeburg-Dothan-Fuquay is defined as nearly level to rolling, well-drained soils; some are loamy throughout, some are sandy to a depth of less than 20 inches and loamy below and some are sandy to a depth of 20 to 40 inches and loamy below. Figure 4-5 shows the general soil types in Jefferson County.

#### 4.1.11 Crash Data

Traffic crash data for the years 1998 through 2002 was obtained from FDOT Safety Office for SR 57 (US 19) and SR 10 (US 90) within the project limits. Additionally, traffic crash data for the years 2000 through 2003 was obtained from Monticello City Police. Florida Highway Patrol (FHP) does not typically respond to traffic accidents on SR 57 (US 19) and SR 10 (US 90) within the city limits unless specifically requested by City Police. Additionally, Monticello City Police does not report accidents to the FDOT Safety Office.

A summary of the FDOT crash data for SR 57 (US 19) is presented in Table 4-2. Table 4-3 summarizes FDOT crash data for SR 10 (US 90). The entire project length of SR 57 (US 19) experienced 39 crashes for the

five-year period, including 69 vehicles, 50 injuries, no fatalities and a total economic loss of \$6,172,401 as reported to the FDOT Safety Office. Figure 4-6 illustrates the number of crashes by location along SR 57 (US 19). Likewise, SR 10 (US 90) experienced 6 crashes, including 10 vehicles, 3 injuries, no fatalities and a total economic loss of \$850,394 as reported to the FDOT Safety Office. Figure 4-7 illustrates the number of crashes by location along SR 10 (US 90).

Monticello City Police crash data for a four-year period, from 2000 through 2003 indicates a per year average of 26 traffic accidents on SR 57 (US 19), 14 traffic accidents on SR 10 (US 90) and 4.5 traffic accidents at the roundabout. There was one report of a vehicle vs. pedestrian accident at the roundabout. Milepost locations for accidents were not available. Anticipated higher crash rate areas would be expected in the two-lanes section of downtown with on-street parking and around the local shopping complex (Winn-Dixie Shopping Center) at milepost 9.0.

In summary, historic crash data does not identify any existing segments that are experiencing significant safety issues. The roundabout averages the highest number of incidents at 4.5 per year, with one vehicle vs. pedestrian accident since 2000.

**Table 4-2**  
**Summary of Crash Data**  
**SR 57 (US 19), Jefferson County, Fla**  
Section 54030000 Milepost 4.451 - 13.366

Type of Collision:	1998	1999	2000	2001	2002	Total
1. Rear End Collision	1	2	1			4
2. Head-on Collision				1		1
3. Angle Collision	5	2	3	2	2	14
4. Left Turn Collision		2		2		4
5. Right Turn Collision			1		1	2
6. Sideswipe Collision	1					1
7. Backing Collision						0
8. Collision w/ Parked Car						0
9. Collision w/ M/V Other Road	1					1
10. Collision w/ Pedestrian						0
11. Collision w/ Bicycle						0
12. Collision w/ Bicycle in Bike Lane						0
13. Collision w/ Moped						0
14. Collision w/ Train						0
15. Collision w/ Animal				1		1
16. M/V Hit Sign/Post						0
17. M/V Hit Utility Pole/Light Pole						0
18. M/V Hit Guardrail	1					1
19. M/V Hit Fence						0
20. M/V Hit Concrete Barrier Wall						0
21. M/V Hit Bridge/Pier/Abutment					1	1
22. M/V Hit Tree/Shrub		1			1	2
23. Collision w/ Construction Barricade/Sign						0
24. Collision w/ Traffic Gate						0
25. Collision w/ Crash Attenuators						0
26. Collision w/ Fixed Object Above Road						0
27. M/V Hit Other Fixed Object						0
28. Collision w/ Moveable Object On Road						0
29. M/V Ran into Ditch/Culvert	1					1
30. Ran Off Road into Water						0
31. Overturned				1	1	2
32. Occupant Fell From Vehicle						0
33. Tractor/Trailer Jackknifed					1	1
34. Fire 35 Explosion						0
77. All Other			1			1
00. Unknown	1		1			2
Total	11	7	7	7	7	39

**Table 4-2 Continued**  
**Summary of Crash Data**  
**SR 57 (US 19), Jefferson County, Fla**  
Section 54030000 Milepost 4.451 - 13.366

Vehicle Type	1998	1999	2000	2001	2002	Total
1. Automobile	15	7	7	6	6	41
2. Passenger Van	1	1	1			3
3. Pickup / Light Truck (2 Rear Tires)	1	3	2	4	2	12
4. Medium Truck (4 Rear Tires)						0
5. Heavy Truck (2 Or More Rear Axles)		1		1	1	3
6. Truck Tractor	1	1	1	1	1	5
7. Motor Home (RV)						0
8. Bus (Drivr + 9 - 15 Pass.)						0
9. Bus (Drivr + > 15 Pass.)						0
10. Bicycle						0
11. Motorcycle						0
12. Moped / Scooter						0
13. ATV						0
14. Train						0
15. Low speed Vehicle						0
77. Other	1		1			2

Site Location	1998	1999	2000	2001	2002	Total
1. Not at Intersection / RR Xing / Bridge	4	1	3	3	3	14
2. At Intersection	5	4	1	1	2	13
3. Influenced By Intersection						0
4. Driveway Access	1	1	1	1	2	6
5. Railroad Crossing						0
6. Bridge						0
7. Entrance Ramp	1	1	2	1		5
8. Exit Ramp				1		1
9. Parking Lot (Public)						0
10. Parking Lot (Private)						0
11. Private Property						0
12. Toll Booth						0
13. Public Bus Stop Zone						0
77. All Other						0

Crash Summary	1998	1999	2000	2001	2002	Total
Total Number of Crashes:	11	7	7	7	7	39
Total Number of Vehicles Involved:	21 *	13	13 *	12	10	69
Injuries:	19	6	8	12	5	50
Fatalities:	0	0	0	0	0	0
Drivers Under Influence:	0	1	1	0	0	2
Economic Loss:	\$1,731,805	\$847,151	\$1,197,815	\$1,197,815	\$1,197,815	\$6,172,401

\* Includes vehicles not accounted for in Vehicle Type Table above

**Table 4-3**  
**Summary of Crash Data**  
**SR 10 (US 90), Jefferson County, Fla**  
Section 54010000 Milepost 8.251 - 13.410

<b>Type of Collision:</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>Total</b>
1. Rear End Collision	1			1		2
2. Head-on Collision						
3. Angle Collision	1	1				2
4. Left Turn Collision						
5. Right Turn Collision						
6. Sideswipe Collision						
7. Backing Collision						
8. Collision w/ Parked Car						
9. Collision w/ M/V Other Road						
10. Collision w/ Pedestrian						
11. Collision w/ Bicycle						
12. Collision w/ Bicycle in Bike Lane						
13. Collision w/ Moped						
14. Collision w/ Train						
15. Collision w/ Animal						
16. M/V Hit Sign/Post						
17. M/V Hit Utility Pole/Light Pole						
18. M/V Hit Guardrail						
19. M/V Hit Fence						
20. M/V Hit Concrete Barrier Wall						
21. M/V Hit Bridge/Pier/Abutment						
22. M/V Hit Tree/Shrub						
23. Collision w/ Construction Barricade/Sign						
24. Collision w/ Traffic Gate						
25. Collision w/ Crash Attenuators						
26. Collision w/ Fixed Object Above Road						
27. M/V Hit Other Fixed Object						
28. Collision w/ Moveable Object On Road						
29. M/V Ran into Ditch/Culvert		1				1
30. Ran Off Road into Water						
31. Overturned		1				1
32. Occupant Fell From Vehicle						
33. Tractor/Trailer Jackknifed						
34. Fire 35 Explosion						
77. All Other						
00. Unknown						
<b>Total</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>6</b>

**Table 4-3 Continued**  
**Summary of Crash Data**  
**SR 10 (US 90), Jefferson County, Fla**  
 Section 54010000 Milepost 8.251 - 13.410

<b>Vehicle Type</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>Total</b>
1. Automobile	2	2		1		5
2. Passenger Van	1	1		1		3
3. Pickup / Light Truck (2 Rear Tires)	1	1				2
4. Medium Truck (4 Rear Tires)						
5. Heavy Truck (2 Or More Rear Axles)						
6. Truck Tractor						
7. Motor Home (RV)						
8. Bus (Drivr + 9 - 15 Pass.)						
9. Bus (Drivr + > 15 Pass.)						
10. Bicycle						
11. Motorcycle						
12. Moped / Scooter						
13. ATV						
14. Train						
15. Low speed Vehicle						
77. Other						

<b>Site Location</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>Total</b>
1. Not at Intersection / RR Xing / Bridge		2		1		3
2. At Intersection	1					1
3. Influenced By Intersection						
4. Driveway Access	1	1				2
5. Railroad Crossing						
6. Bridge						
7. Entrance Ramp						
8. Exit Ramp						
9. Parking Lot (Public)						
10. Parking Lot (Private)						
11. Private Property						
12. Toll Booth						
13. Public Bus Stop Zone						
77. All Other						

<b>Crash Summary</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>Total</b>
Total Number of Crashes:	2	3	0	1	0	6
Total Number of Vehicles Involved:	4	4	0	2	0	10
Injuries:	0	2	0	1	0	3
Fatalities:	0	0	0	0	0	0
Drivers Under Influence:	0	1	0	0	0	1
Economic Loss:	\$45,720	\$551,838	\$0	\$252,836	\$0	\$850,394

#### 4.1.12 Intersections and Signalization

There are no signalized intersections along the SR 57 (US 19) corridor within the project limits.

There are three major unsignalized intersections:

- SR 57 (US 19) at CR 259
- SR 57 (US 19) at SR 10 (US 90) – Roundabout
- SR 57 (US 19) at CR 149/CR 259A

A new high school has been opened at the southern end of the project limits. The high school entrance accesses SR 57 (US 19) at a non-signalized intersection.

#### 4.1.13 Lighting

There are no streetlights along the SR 57 (US 19) corridor except within the Monticello city limits, from Cherokee Street to the northern city limits, where lighting consists of widely spaced luminaries. The Progress Energy maintains the lighting, while the costs are borne by the City of Monticello.

#### 4.1.14 Utilities

Numerous utilities exist within and adjacent to the SR 57 (US 19) right-of-way. Utility owners with facilities located within the project limits include:

- Progress Energy
- Sprint
- MCI – WorldCom
- ComCast Cable
- City of Monticello – Water and Sewer

#### 4.1.15 Pavement Conditions

The existing corridor has or is currently being milled and resurfaced. Therefore, the pavement conditions are excellent.

### 4.2 EXISTING BRIDGES

The SR 57 (US 19) crossing over the CSX railroad involves twin bridges at milepost 6.255 as part of the grade separated crossing of the CXS railroad. The structures also cross a small channel with a well-vegetated bank.

Bridge number 540008 carries southbound traffic on SR 57 (US 19) and was constructed in 1963. This structure is 306 feet in length and consists of 6 spans

at approximately 53 feet. The superstructure consists of a cast-in-place concrete deck on precast prestressed concrete girders. The substructure is concrete piles and steel columns with a concrete pier cap. According to the latest bridge inspection report dated January 15, 2003, the structure has a sufficiency rating of 86.1 but is functionally obsolete presumably due to lack of shoulder width. The bridge provides 22.05 feet of vertical clearance and 11.92 feet of horizontal clearance to the railroad. The western most exterior girder carries water and sewer conduits.

Bridge number 540048 carries northbound traffic on SR 57 (US 19) and was constructed in 1951. This structure also has a sufficiency rating of 86.1 and is listed as functionally obsolete based on the January 15, 2003 inspection report. This structure is 308 feet in length and consists of 8 spans with a maximum span length of 63 feet. The superstructure consists of a cast-in-place concrete deck on steel girders. The substructure is concrete piles and steel columns with a concrete pier cap. The bridge provides 21.65 feet of vertical clearance and 24.58 feet of horizontal clearance to the railroad.

### 4.3 ENVIRONMENTAL CHARACTERISTICS

#### 4.3.1 Land Use Data

The Project Limits shown in Figure 2-1 covers a large portion of central Jefferson County including the central business district of Monticello. Existing land use within the SR 57 (US 19) project limits includes a mixture of commercial, residential, institutional, agricultural and conservation uses. A large portion of the Monticello central business district is designated as a historic district (see Section 4.3.2.3). Future land uses are expected to be consistent with existing conditions. Figure 4-8 shows the locations of these general land use categories for Jefferson County and Figure 4-9 for the City of Monticello.

#### 4.3.2 Cultural Features

##### *4.3.2.1 Cultural Features and Community Services*

Cultural Features and Community Services information was gathered from various sources such as city, county, state, USGS topographic quadrangle maps and aerial photographs. The types of cultural and community services within the project limits include schools, parks / recreation areas, churches, social service agencies, medical facilities, government offices, community centers and emergency facilities. The locations of many of these facilities are shown in Figure 4-10.

##### 1. Schools

Five (5) schools are located within the project limits. They are:

Jefferson County Elementary (public), Jefferson County High (public), Howard Middle School (public), Jefferson County Adult School (public) and the Sovereign Grace Academy (private). All of these facilities are generally located within the downtown district except for the high school. The new Jefferson County High School has been moved to a location near the southern limits of the project. Figure 4-10 shows the locations of the public schools only.

## 2. Parks / Recreation Areas

Two (2) small parks are located within the southeast quadrant of the city, one at the intersection of Chase Drive and Railroad Street and the other at the intersection of Marvin Street and Martin Luther King Street. The larger Jefferson County Recreation Park is located in the northeast quadrant of the city adjacent to Mamie Scott Drive.

## 3. Churches

The majority of the churches are located within the historic downtown district. Five (5) churches are located south of the downtown district along SR 57 (US 19), CR 259 and Aucilla Road. Church locations can be found on Figure 4-10.

## 4. Social Service Agencies

All social service facilities are located within the downtown district. These include the Jefferson County Court House, Chamber of Commerce, Post Office, City Hall, The Boys and Girls Club of Monticello and the Supervisor of Elections office.

## 5. Medical Facilities

The only public medical facility is the Jefferson County Health Department, located west of the downtown district on SR 10 (US 90). There are other private doctor / dentist offices located along both SR 57 (US 19) and SR 10 (US 90) within the downtown district and just south of downtown. The public medical facility is shown in Figure 4-10.

## 6. Community Centers

There are no designated community centers. However, the City Hall, Chamber of Commerce, the County Courthouse and the Monticello Opera House are all used for community gatherings.

## 7. Emergency Services

There are two (2) police station and two (2) fire stations within the

project limits. The Monticello City Police station is located southwest of the Courthouse, south of the Opera House. The County Sheriff and jail is located in the Industrial Park off of south SR 57 (US 19). One fire station is located north of downtown near the SR 57 (US 19) / Scott Drive intersection and the other south of downtown near the SR 57 (US 19) / Martin Street intersection. These locations are shown in Figure 4-10.

#### *4.3.2.2 Historic/Archaeological Resources*

The Monticello Historic District is generally located in the downtown district centered along SR 57 (US 19) and SR 10 (US 90) (See Figure 4-10). According to information from the State Historic Preservation Office (SHPO), 541 historic structures are present within the project limits, predominantly within the city limits. These structures, by definition, are greater than 50 years of age and are not necessarily listed or eligible for listing on the National Register of Historic Places. The most prominent sites are generally located along or very near SR 57 (US 19) and include: the county Courthouse, the Monticello Opera House, several churches and several large 18th and 19th century homes. There are no documented archaeological sites within the project area.

### 4.3.3 Natural and Biological Features

#### *4.3.3.1 Wetlands*

A map of all the hydric soils for the entire project limits is included as Figure 4-11. Although these areas are shown as having hydric soils, it does not necessarily mean that all of these areas are wetlands, by definition. Wetlands are those areas where the water table is at, near, or above the ground surface for a significant portion of the growing season during most years. Wetland areas are often associated with topographically low-lying sites within the overall landscape. The hydrologic regime is such that aquatic or hydrophytic vegetation is usually established. Since a thorough survey has not been conducted of all the natural areas within the project limits at this time, the hydric soils map is the best indicator of the likely areas that will contain wetlands. The presence of wetlands would be determined by an evaluation of the project limits to confirm vegetative cover, hydrology and soil types in order to determine jurisdictional wetland areas in accordance with the 1987 U.S. Army Corps of Engineers (USACOE) Wetland Delineation Manual (Wetlands Training Institute, 1995) and Chapter 62-340, Florida Administrative Code (FAC) as administered by the Florida Department of Environmental Protection (FDEP) and the Suwannee River Water Management District (SRWMD).

#### 4.3.3.2 Threatened and Endangered Species

Using information obtained from the Florida Fish and Wildlife Conservation Commission (FFWCC), the U.S. Fish and Wildlife Service (USFWS), the Florida Natural Areas Inventory (FNAI) and the Florida Department of Agriculture and Consumer Services (FDA), a list of potentially occurring species categorized in some way by the respective jurisdictional agencies as meriting special protection or consideration was developed for the project area. This information is presented in Table 4-4.

**Table 4-4**  
**Threatened and Endangered Species**

<b>Potentially Occurring Protected Species</b>	<b>USFWS</b>	<b>FFWCC</b>	<b>FDA</b>
Eastern Indigo Snake ( <i>Drymarchon corais corais</i> )	T	T	-
Gopher Tortoise ( <i>Gopherus polyphemus</i> )	C2	SSC	-
Florida Pine Snake ( <i>Pituophis melanoleucus mugitus</i> )	C2	SSC	-
American Alligator ( <i>Alligator mississippiensis</i> )	T (S/A)	SSC	-
Bald Eagle ( <i>Haliaeetus leucocephalus</i> )	T	T	-
Florida Sandhill Crane ( <i>Grus Canadensis pratensis</i> )	-	SSC	-
Florida Black Bear ( <i>Ursus americanus floridanus</i> )	C2	T	-
Southern Red Lily ( <i>Lilium catesbaei</i> )	-	-	T
Florida Corkwood ( <i>Leitneria floridana</i> )	-	-	T

E = Endangered

T = Threatened

SSC = Species of special concern

T (S/A) = Threatened due to similarity of appearance

C2 = Candidate species for listing

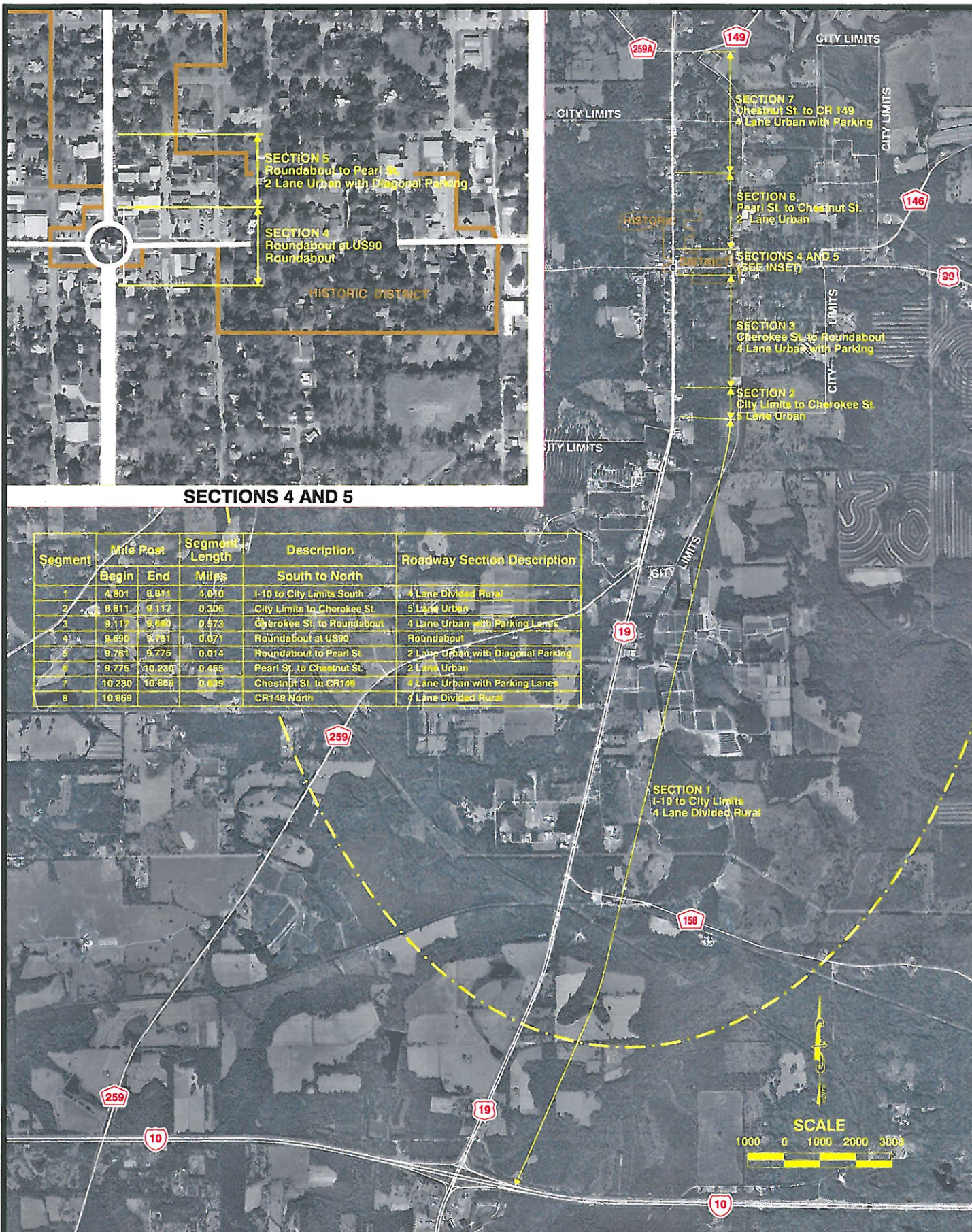
#### 4.3.4 Contamination Sites

Potential contamination sites generally include those facilities, which generate, store, use, or dispose of petroleum-based or other hazardous materials. A windshield survey was conducted to determine what types of facilities, which would handle hazardous materials, exist within the project area. Potential contamination sites are shown in Figure 4-12

The majority of the potential contamination sites are located along SR 57 (US 19) and some along SR 10 (US 90). A high percentage of the sites are operating or former gasoline service stations. Automobile body shops / garages, Florida Department of Transportation (FDOT) and Jefferson County Roadway maintenance yards, printing facilities and dry cleaners are located adjacent to or very near SR 57 (US 19). Some operating and former service stations and two regional petroleum supply terminals are located along SR 10 (US 90), east and west of the Courthouse. Other sites, which have the potential to handle hazardous materials, include: manufacturing facilities near the southern project limits, fuel tanks associated with farming / nursery activities throughout the project limits, three county disposal / recycle drop-off stations and a wastewater treatment facility. Arsenic contamination of the soil and / or groundwater could be present along the abandoned railroad grade or at any cattle dipping vats, which could be present in the rural farming areas. No Florida Department of Environmental Protection (FDEP) or county contamination records have been reviewed.

#### 4.3.5 Noise Sensitive Sites

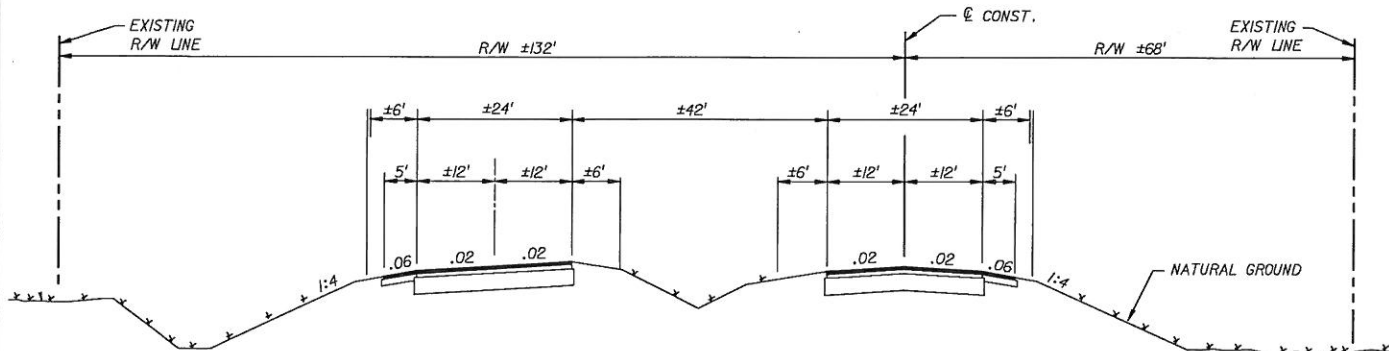
Many potential noise sites are present throughout the project limits. A noise sensitive receiver is defined in the Project Development and Environment (PD&E) Manual as "Any property (owner occupied, rented, or leased) where frequent exterior human use occurs and where a lowered noise level would be of benefit". In those situations where there are no exterior activities to be affected by the traffic noise, the interior of the building shall be used to identify a noise sensitive receiver. Results of literature searches and ground-truthing indicated that the majority of the noise sensitive sites are single family and multi-family dwellings, followed by churches, schools, parks and the Opera House. The highest densities of potential noise sensitive receivers would be in or very near the city limits. The remaining sites, generally single-family dwellings, are located in the rural farmland areas throughout the project limits.



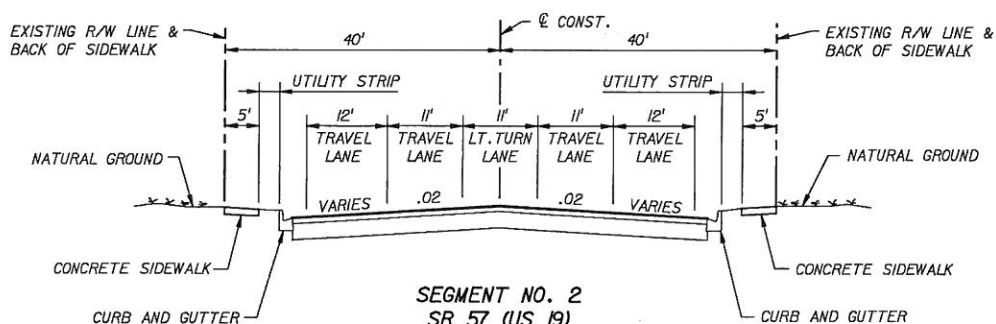
**SR 57 (US 19)  
MONTICELLO  
BY-PASS  
STUDY**

**ROADWAY  
SEGMENT  
SURVEY**

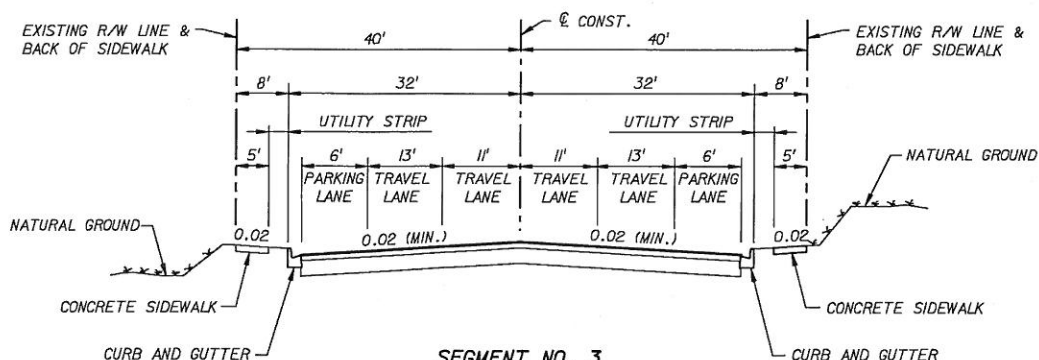
**FIGURE 4-1**



SEGMENT NO. 1  
SR 57 (US 19)  
I-10 TO SOUTH CITY LIMITS  
4 LANE DIVIDED RURAL



SEGMENT NO. 2  
SR 57 (US 19)  
SOUTH CITY LIMITS TO CHEROKEE STREET  
5 LANE URBAN



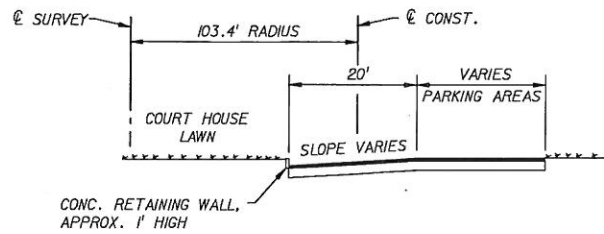
SEGMENT NO. 3  
SR 57 (US 19)  
CHEROKEE STREET TO ROUNDABOUT  
4 LANE URBAN WITH PARKING LANES



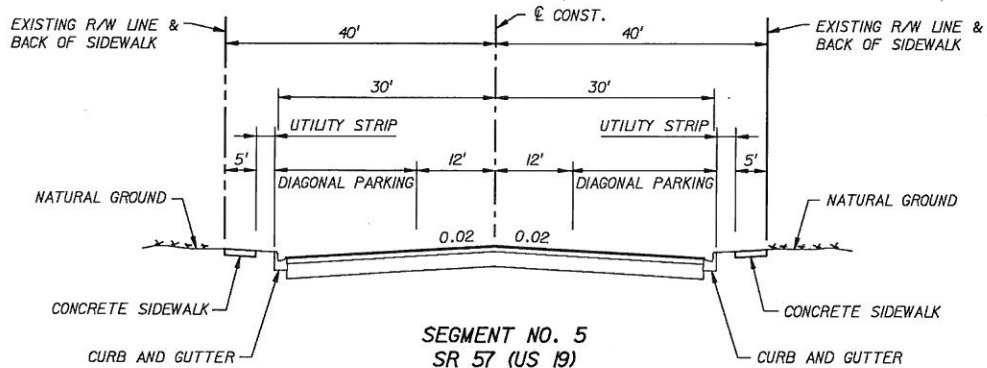
SR 57 (US 19)  
MONTICELLO  
BY-PASS  
STUDY

EXISTING  
TYPICAL SECTIONS  
1 OF 3

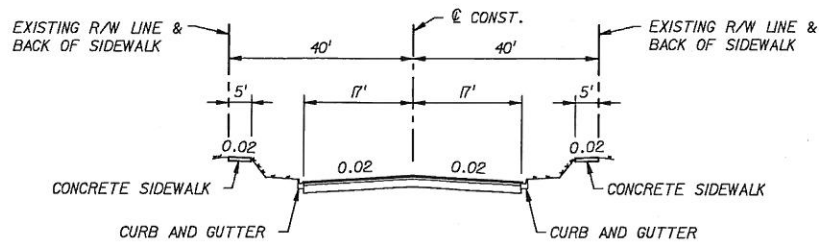
FIGURE 4-2



SEGMENT NO. 4  
SR 57 (US 19)  
ROUNDBOUT AT SR 10 (US 90)  
ROUNDBOUT



SEGMENT NO. 5  
SR 57 (US 19)  
ROUNDBOUT TO PEARL STREET  
2 LANE URBAN WITH DIAGONAL PARKING



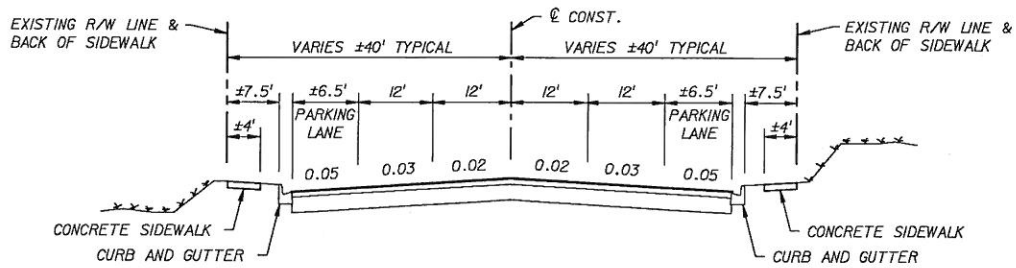
SEGMENT NO. 6  
SR 57 (US 19)  
PEARL STREET TO CHESTNUT STREET  
2 LANE URBAN



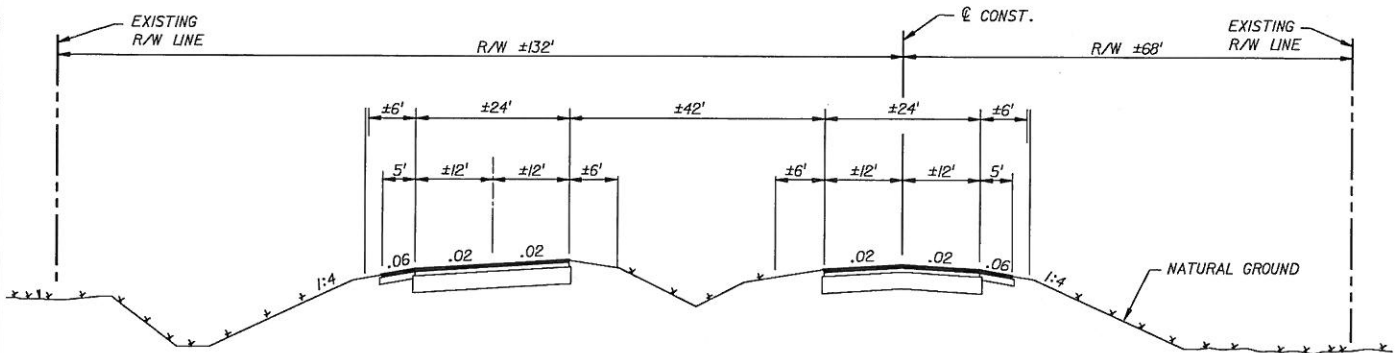
SR 57 (US 19)  
MONTICELLO  
BY-PASS  
STUDY

EXISTING  
TYPICAL SECTIONS  
2 OF 3

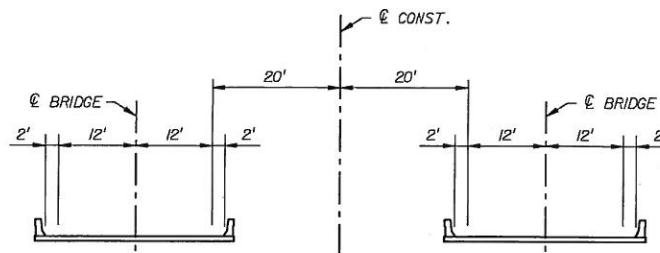
FIGURE 4-3



SEGMENT NO. 7  
SR 57 (US 19)  
CHESTNUT STREET TO CR 149  
4 LANE URBAN WITH PARKING LANES



SEGMENT NO. 8  
SR 57 (US 19)  
CR 149 TO GEORGIA LINE  
4 LANE DIVIDED RURAL



TYPICAL BRIDGE SECTION

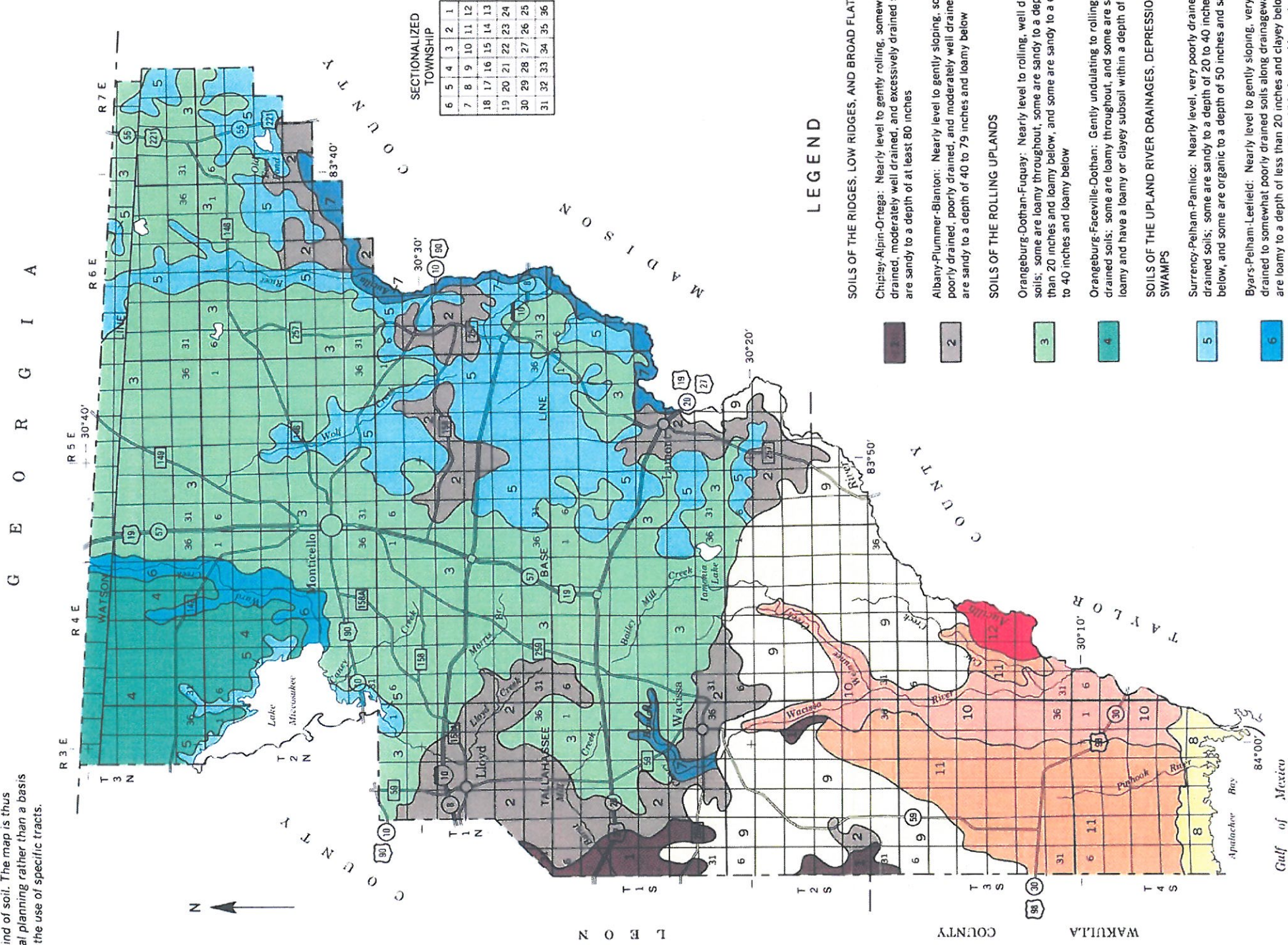


SR 57 (US 19)  
MONTICELLO  
BY-PASS  
STUDY

EXISTING  
TYPICAL SECTIONS  
3 OF 3

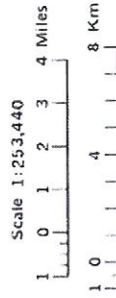
FIGURE 4-4

Each area outlined on this map consists of more than one kind of soil. The map is thus meant for general planning rather than a basis for decisions on the use of specific tracts.



U.S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
UNIVERSITY OF FLORIDA  
INSTITUTE OF FOOD AND AGRICULTURAL SCIENCES  
AGRICULTURAL EXPERIMENT STATIONS  
SOIL SCIENCE DEPARTMENT  
FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES

## GENERAL SOIL MAP JEFFERSON COUNTY, FLORIDA



COMPILED 1986

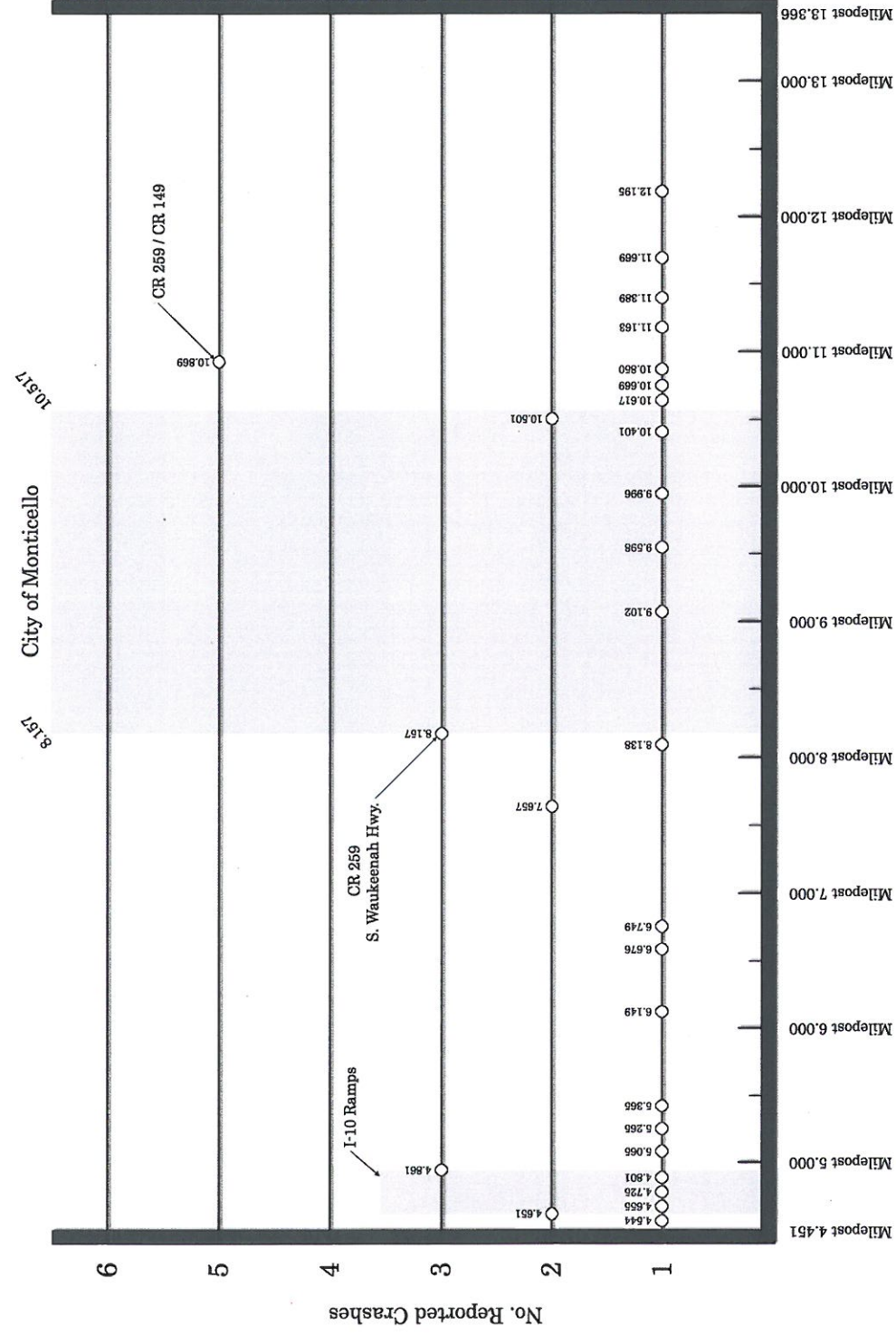
SR 57 (US 19)  
MONTICELLO  
BY-PASS  
STUDY



GENERAL SOIL TYPES

FIGURE 4-5

SR57 (US 19) Crashes by Milepost (1998-2002)  
Mileposts 4.451 - 13.366 (Jefferson County)

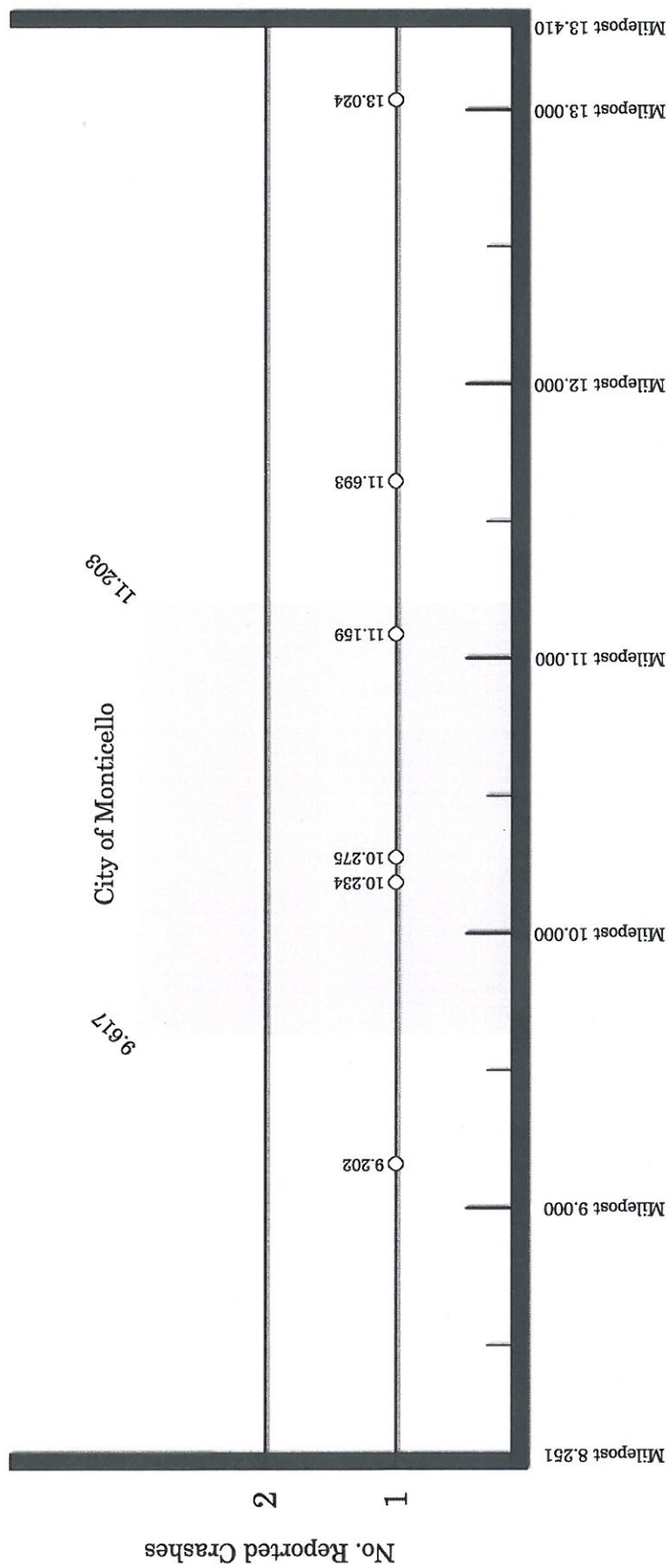


SR 57 (US 19)  
MONTICELLO  
BY-PASS  
STUDY

SR 57 (US 19) CRASHES BY MILEPOST

FIGURE 4-6

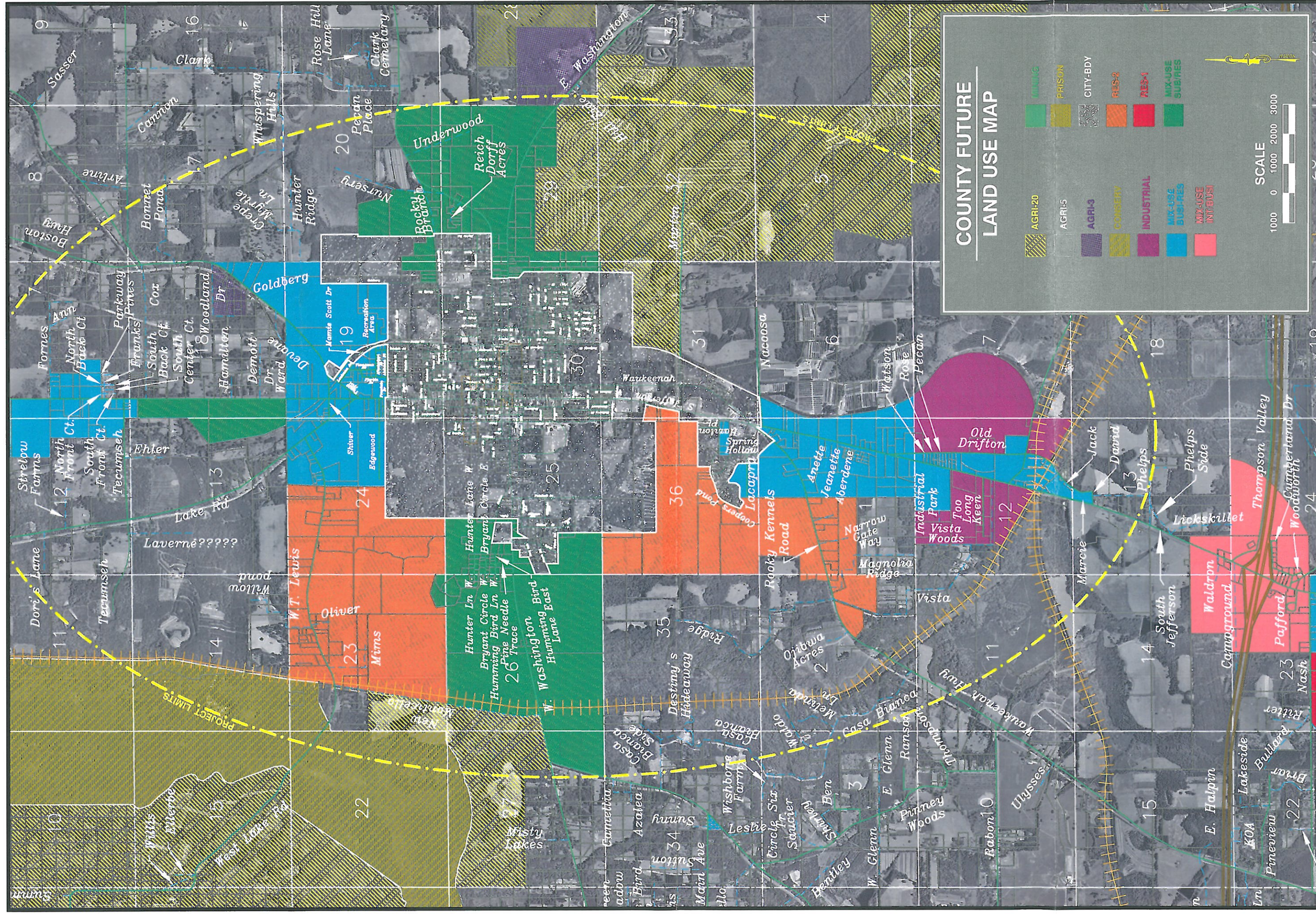
SR 10 (US 90) Crashes By Milepost (1998 - 2002)  
Mileposts 8.251 - 13.410 (Jefferson County)

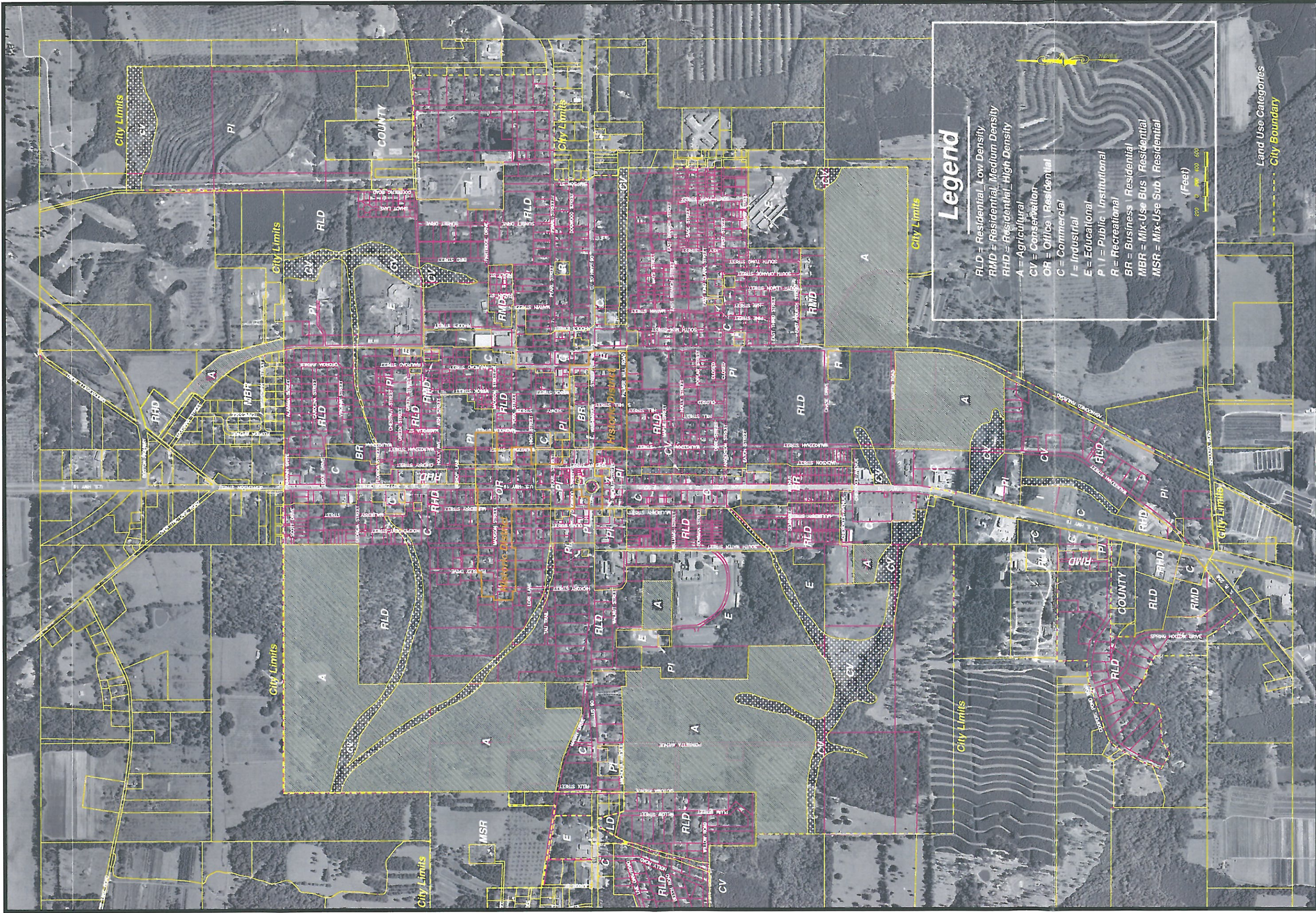


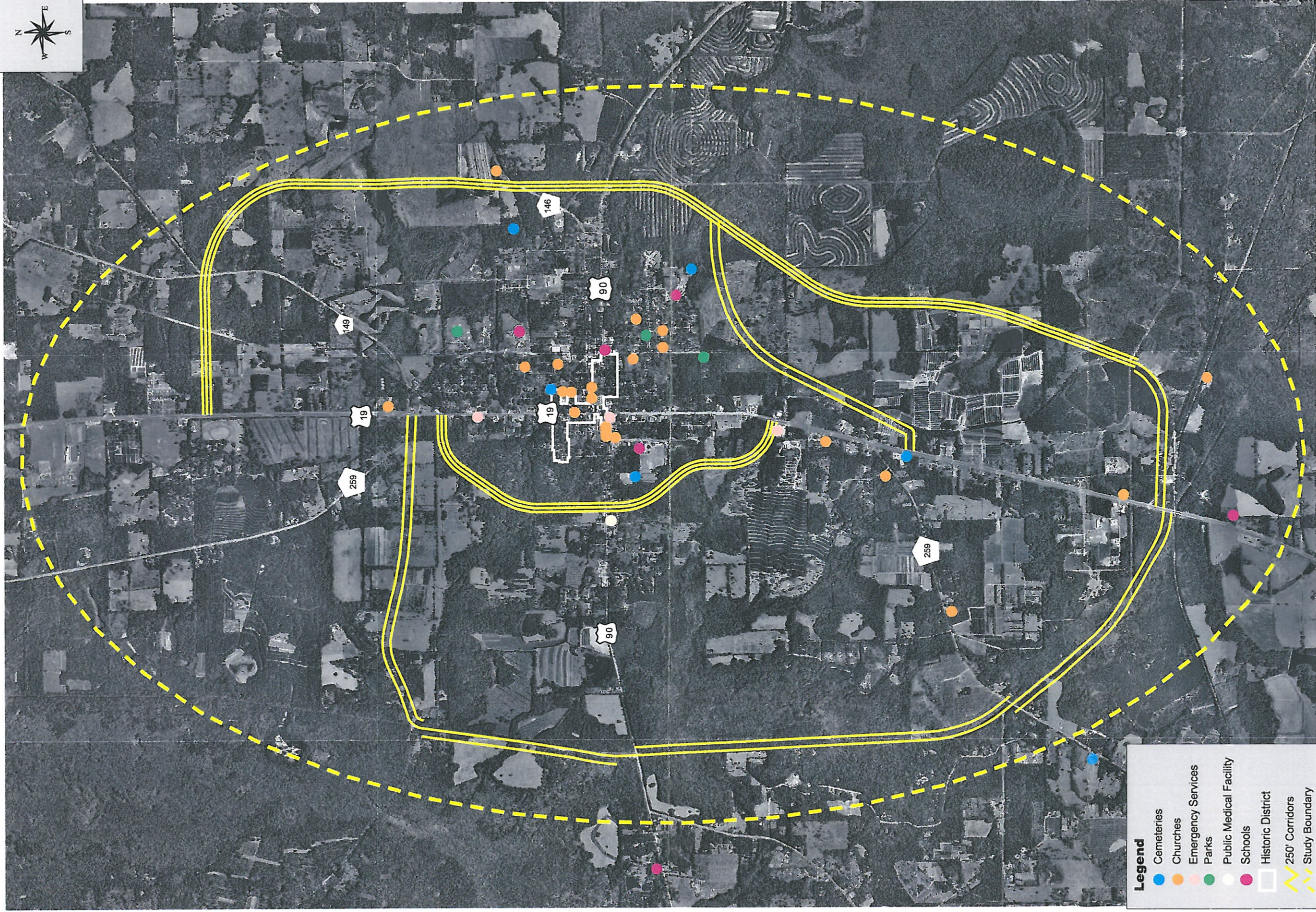
SR 57 (US 19)  
MONTICELLO  
BY-PASS  
STUDY

SR 10 (US 90) CRASHES BY MILEPOST

FIGURE 4-7







- Legend**
- Cemeteries
  - Churches
  - Emergency Services
  - Parks
  - Public Medical Facility
  - Schools
  - Historic District
  - 250' Corridors
  - Study Boundary

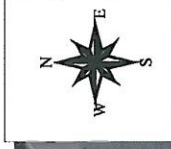
SR 57 (US 19)  
MONTICELLO  
BY-PASS  
STUDY



CULTURAL AND SOCIAL FEATURES MAP  
MONTICELLO BYPASS  
JEFFERSON COUNTY, FLORIDA

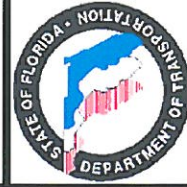
Scale: 1" = 3000'

FIGURE 4-10



**Legend**

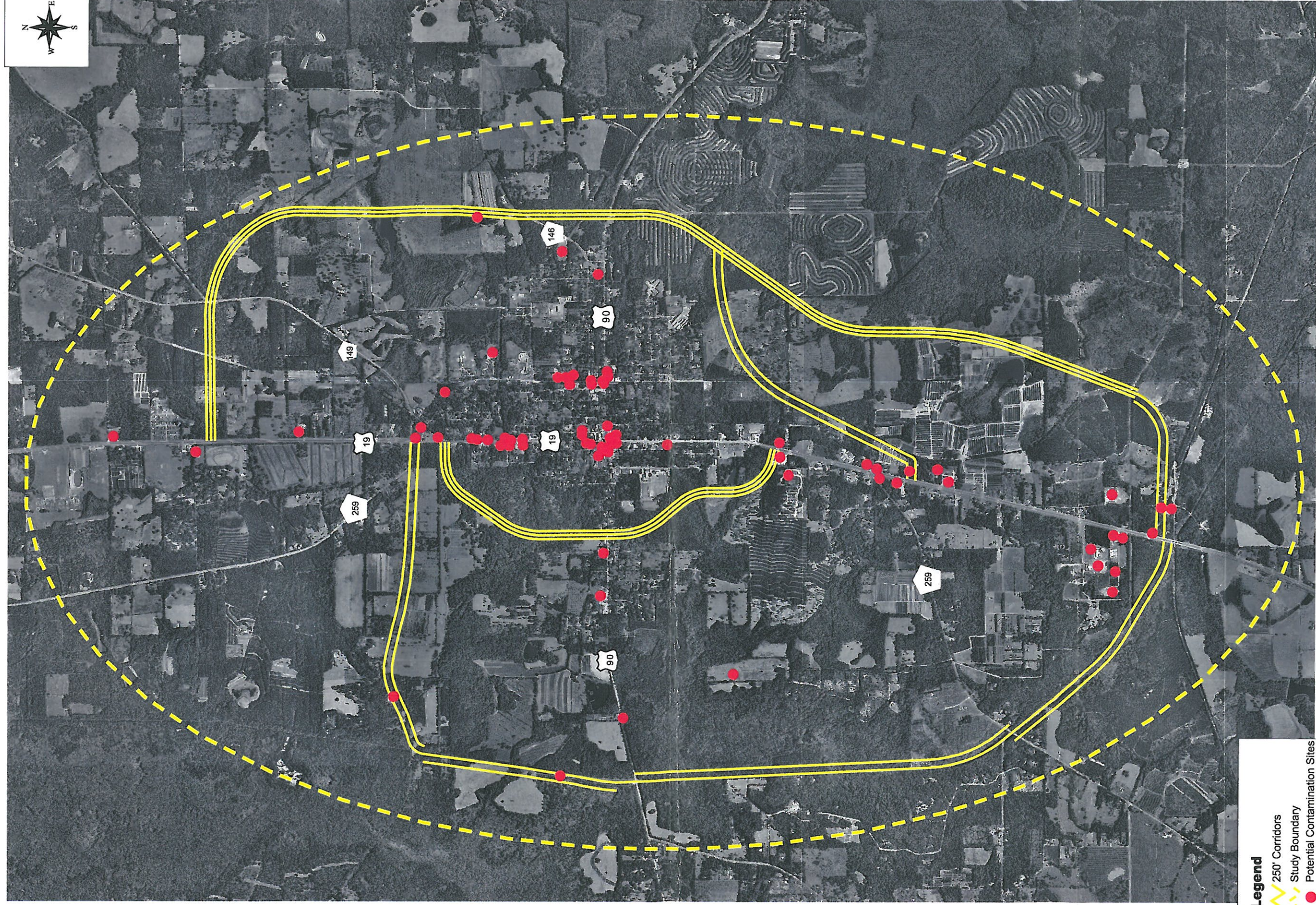
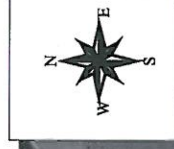
- 250' Corridors
- Study Boundary
- Hydric Soils



SR 57 (US 19)  
MONTICELLO  
BY-PASS  
STUDY

HYDRIC SOILS MAP  
MONTICELLO BYPASS  
JEFFERSON COUNTY, FLORIDA

Scale: 1" = 3000'  
FIGURE 4-11



- Legend**
- 250' Corridors
  - Study Boundary
  - Potential Contamination Sites



SR 57 (US 19)  
MONTICELLO  
BY-PASS  
STUDY

POTENTIAL CONTAMINATION SITES MAP  
MONTICELLO BYPASS  
JEFFERSON COUNTY, FLORIDA

Scale: 1" = 3000'

FIGURE 4-12

## **5.0 DESIGN CRITERIA AND STANDARDS**

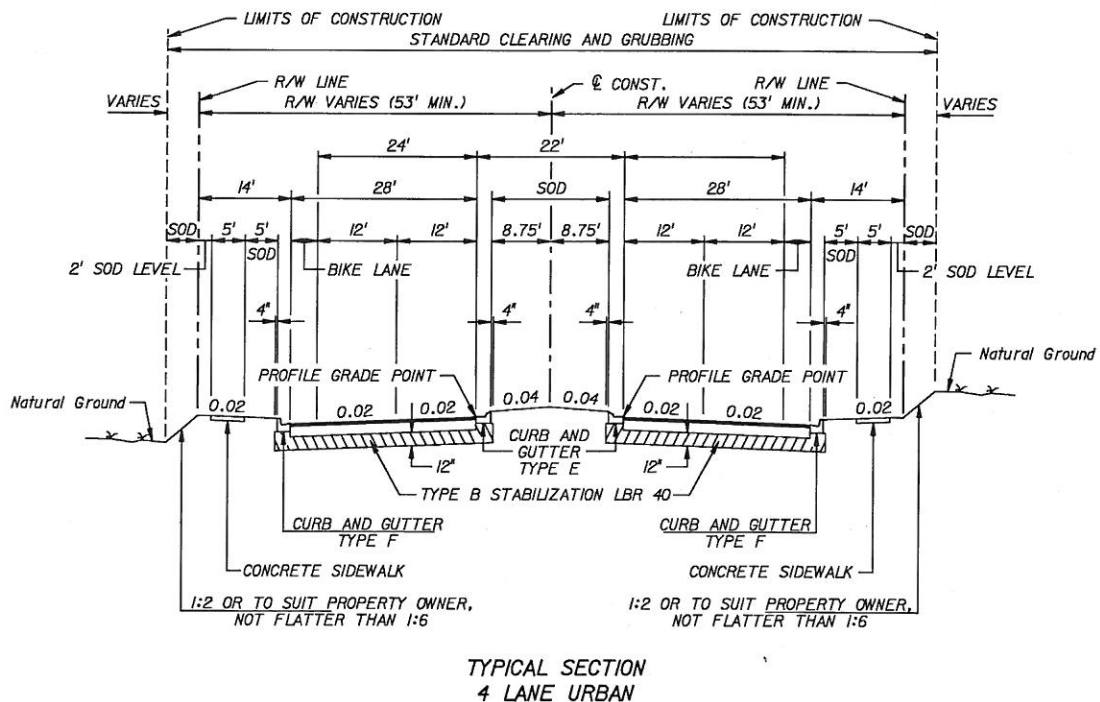
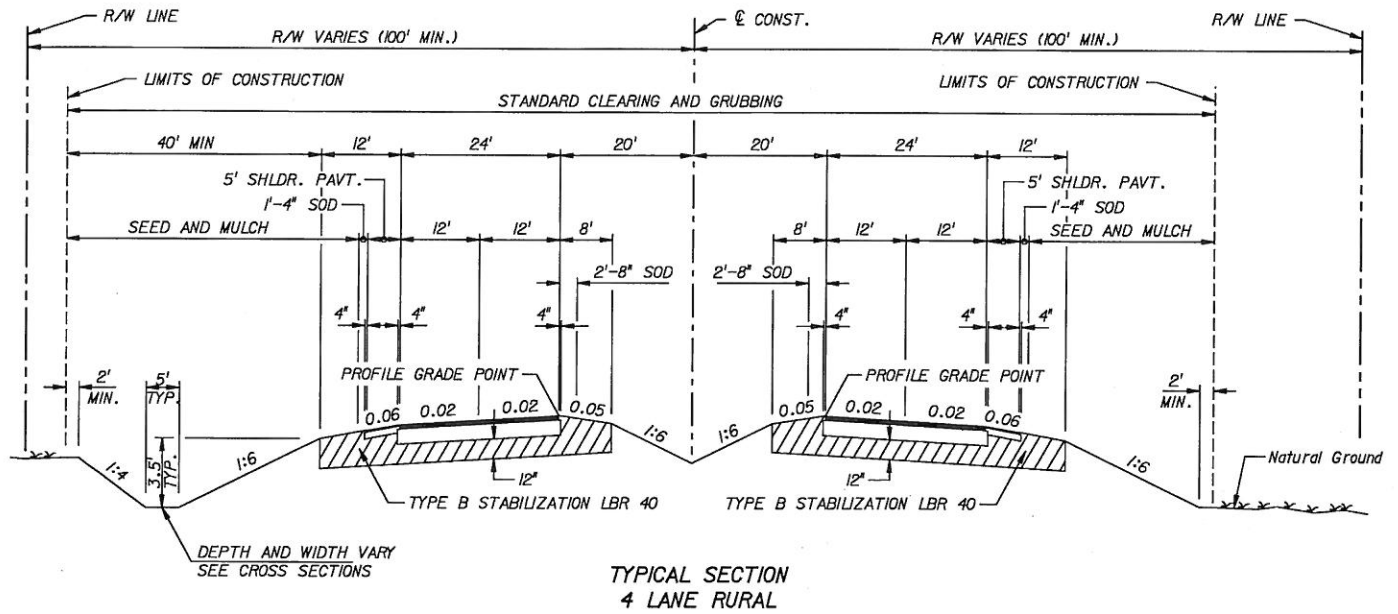
The engineering design of this project will, as a minimum, be governed by the criteria of the FDOT "Roadway Plans Preparation Manual", the FDOT "Roadway and Traffic Design Standards" and the AASHTO "A Policy on Geometric Design of Highways and Streets". In addition, since SR 57 (US 19) is on the Florida Intrastate Highway System (FIHS), design will be governed by the FDOT "Development of the Florida Intrastate Highway System". SR 57 (US 19) is also listed as an "emerging corridor" on the FDOT Strategic Intermodal System (SIS), however, no formal design criteria has been established for roadways listed on the SIS. The rural and urban (curb and gutter drainage) typical section design criteria and standards used for this study are provided in Tables 5-1 and 5-2 respectively. Proposed typical sections are shown in Figures 5-1 and 5-2.

**Table 5-1 "Rural" Design Criteria\***

<b>Design Element</b>	<b>Criteria</b>	<b>Source</b>
Functional Classification	Rural Principal Arterial (on FIHS/SIS)	FDOT SLD
Design Year	2030	FDOT
Design Speed	65 mph	1. Table 1.9.2
Design Vehicle	WB-50	3. Ch. 2
Roadway Cross-Section		
Lane Widths	12'	1. Table 2.1.1
Shoulder Widths	5' for Bicycle Lanes (Paved Shoulder)	1. Table 2.1.2
Cross Slopes	12' (5' paved)	1. Table 2.3.2
Median Width	2.0% for Travel Lanes	1. Figure 2.1.1
Clear Zone	6% for Shoulder (Paved Bicycle Lanes)	1. Table 2.3.2
Minimum Border Width	40'	1. Table 2.2.1
	36' (24' for auxiliary lanes)	1. Table 2.11.10
	40' from outside edge of shoulder	1. Table 2.5.1
Horizontal Alignment		
Max. Superelevation	10.0%	1. Table 2.8.3
Max. Curvature	4° 15'	1. Table 2.8.3
Max. Curvature w/o Super	0° 15' with normal crown	1. Table 2.9.1
	0° 30' with reverse crown	1. Table 2.9.1
Max. Deflection w/o Curve	0° 45'	1. Table 2.8.1a
Minimum Length of Curve	975', 400' minimum	1. Table 2.8.2a
Vertical Alignment		
Max. Grade	3.0% flat terrain, 4.0% rolling terrain	1. Table 2.6.1
Min. K for Sag Vertical Curves	157	1. Table 2.8.5
Min. K for Crest Vert. Curves	313	1. Table 2.8.6
Max. Change in Grade w/o Vertical Curve	0.3%	1. Table 2.6.2
Min. Base Clearance from DHW	3'	1. Table 2.6.3
Right of Way Requirements	Varies: 192' Minimum	
Level of Service	B (C for 2-lane roadway)	2. Ch. 6, Table 6-1
Access Classification		
Existing	Class 4	FDOT
Proposed	Class 3	FIHS Standards
1. FDOT Plans Preparation Manual, Volume I English (January 2004)		
2. Florida's Quality/Level of Service Handbook		
3. AASHTO A Policy on Geometric Design of Highways and Streets (2001)		
* with open drainage system		

**Table 5-2 "Urban" Design Criteria\***

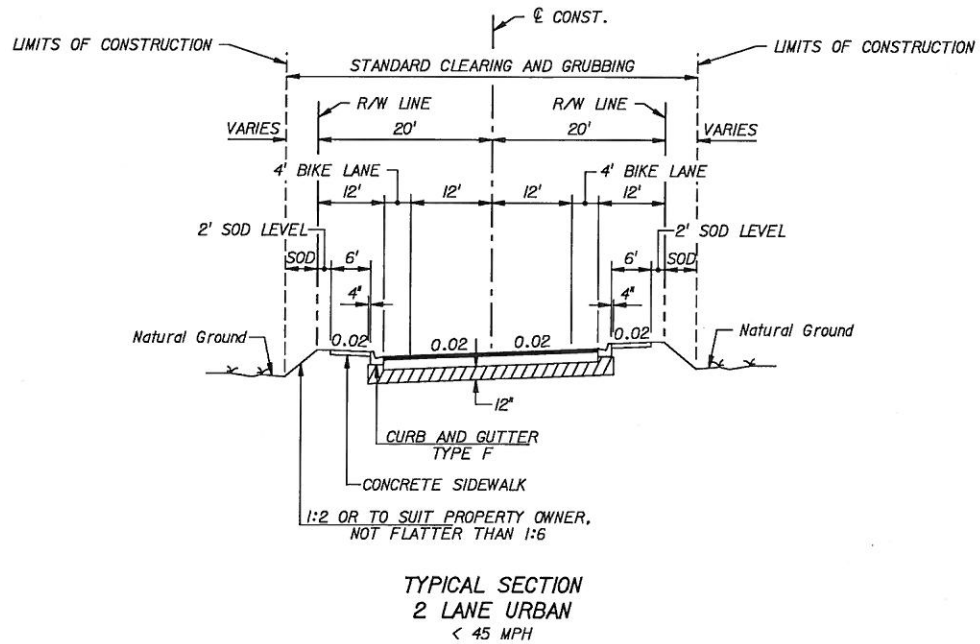
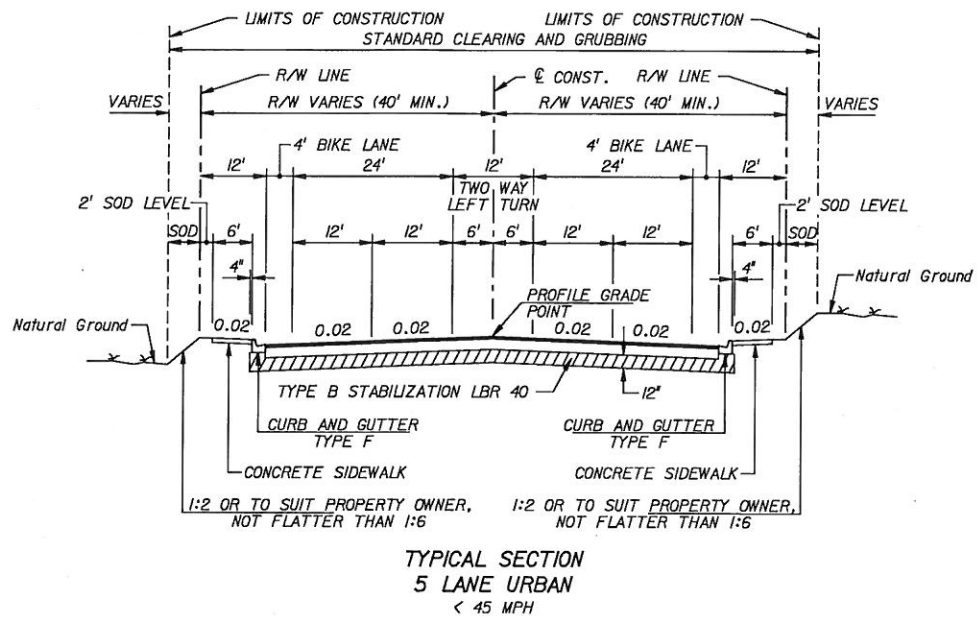
<b>Design Element</b>	<b>Criteria</b>	<b>Source</b>
Functional Classification	Rural Principal Arterial (on FIHS/SIS)	FDOT SLD
Design Year	2030	FDOT
Design Speed	50 mph required for FIHS	1. Table 1.9.1
Design Vehicle	WB-50	3. Ch. 2
Roadway Cross-Section		
Lane Widths	12'	1. Table 2.1.1
Cross Slopes	4' for Bicycle Lanes (Paved Shoulders) 2.0% for Travel Lanes Match Outside Travel Lane for Bicycle Lanes	1. Table 2.1.2 1. Figure 2.1.1
Median Width	22'	1. Table 2.2.1
Horizontal Clearance	4'	1. Table 2.11.4
Minimum Border Width	14' (12' if Bike Lane Present)	1. Table 2.5.2
Horizontal Alignment		
Max. Superelevation	5.0%	1. Table 2.8.3
Max. Curvature	6° 30'	1. Table 2.8.3
Max. Curvature w/o Super	2° 0' normal crown 4° 45' reverse crown	1. Table 2.9.2 1. Table 2.9.2
Max. Deflection w/o Vertical Curve	1° 00' 750' , 400' minimum	1. Table 2.8.1a 1. Table 2.8.2a
Minimum Length of Curve		
Vertical Alignment		
Max. Grade	6.0% flat terrain, 7.0% rolling terrain	1. Table 2.6.1
Minimum Grade	0.3%	1. Table 2.6.4
Min. K for Sag Vertical Curves	96	1. Table 2.8.6
Min. K for Crest Vert. Curves	136	1. Table 2.8.5
Max. Change in Grade w/o Curve	0.60%	1. Table 2.6.2
Min. Base Clearance from DHW	1'	1. Table 2.6.3
Right of Way Requirements	Varies: 92' Minimum	
Level of Service	B (C for 2-lane roadway)	2. Ch. 6, Table 6-1
Access Classification		
Existing	Class 4	FDOT
Proposed	Class 3	FIHS Standards
1. FDOT Plans Preparation Manual, Volume I English (January 2004)		
2. Florida's Quality/Level of Service Handbook		
3. AASHTO A Policy on Geometric Design of Highways and Streets (2001)		
* with closed drainage system (curb and gutter)		



**SR 57 (US 19)  
MONTICELLO  
BY-PASS  
STUDY**

**PROPOSED  
TYPICAL SECTIONS  
1 OF 2**

**FIGURE 5-1**



## 6.0 TRAFFIC

Traffic data collected for this project included four (4) seven-day vehicle classification counts, one (1) eight-hour turning movement count and one (1) 48-hour volume count.

### 6.1 TRAFFIC DATA COLLECTION

#### 6.1.1 Seven-Day Vehicle Classification Counts

Classification counts were conducted in February and March 2004 at the following locations:

Station 7001 – E. SR 10 (US 90) east of Simpson Street

Station 7002 – N. SR 57 (US 19) south of CR 149

Station 7003 – W. SR 10 (US 90) west of Hickory Street

Station 7004 – S. SR 57 (US 19) at four-lane divided segment, south of city limits

Printouts of the classification counts are included in Appendix B. For Station 7002, data for the last day of the count, February 24, was not available and for Station 7004, data for the northbound lanes was available only for February 18-21.

Table 6-1 summarizes the percentages of medium trucks (vehicle classes 4 and 5 – buses and two-axle trucks) and heavy trucks (vehicle classes 6 through 13 – multi-axle trucks) at each count location for the weekday am and pm peak hours. The percentage of total trucks was approximately 10% on SR 10 (US 90) in both the am and pm peaks. On SR 57 (US 19), the percentages were approximately 20% in both the am and pm peaks north of Monticello and approximately 15% in the am peak and 8% in the pm peak south of Monticello.

#### 6.1.2 Eight-Hour Turning Movement Counts

An eight-hour turning movement count was conducted at the intersection of SR 10 (US 90) and SR 57 (US 19). The count was conducted on Wednesday, February 25, 2004, from 7:00 – 9:00 am, 11:00 am – 2:00 pm and 3:00 – 6:00 pm. In addition to a total vehicle count, medium and heavy trucks were counted separately. Pedestrians were also counted separately. A printout of the count, including truck and pedestrian counts, is included in Appendix C.

NOTE: Although the intersection is a roundabout, the turn count is presented as if it were a standard four-leg intersection. For example, a northbound left turn shown in the turn count represents the northbound-to-westbound movement, which actually must turn right, circle around and

turn right again.

#### 6.1.3 48-Hour Volume Counts

A 48-hour volume count was conducted on May 4-5, 2004, on SR 57 (US 19) south of York Street. This count was conducted because it was noted that one roadway segment (SR 57 (US 19) from SR 10 (US 90) to Chestnut Street) did not have a count station to provide data for level of service analysis.

**TABLE 6-1**  
**Weekday AM and PM Peak Hour Truck Percentages**  
**SR 10 (US 90) and SR 57 (US 19)**

**7001 - SR 10 (US 90) E. of Simpson**

	Total Veh.	Med. Trucks	Hvy. Trucks	Total Trucks	Med. Truck %	Hvy. Truck %	Total Truck %
Mar. 4							
AM peak	292	18	12	30	6.16%	4.11%	10.27%
PM peak	274	11	5	16	4.01%	1.82%	5.84%
Mar. 9							
AM peak	301	20	5	25	6.64%	1.66%	8.31%
PM peak	251	12	7	19	4.78%	2.79%	7.57%
Mar. 10							
AM peak	311	23	9	32	7.40%	2.89%	10.29%
PM peak	314	21	8	29	6.69%	2.55%	9.24%

**7002 - SR 57 (US 19) S. of CR 259**

	Total Veh.	Med. Trucks	Hvy. Trucks	Total Trucks	Med. Truck %	Hvy. Truck %	Total Truck %
Feb. 18							
AM peak	682	59	77	136	8.65%	11.29%	19.94%
PM peak	869	97	89	186	11.16%	10.24%	21.40%
Feb. 19							
AM peak	685	52	80	132	7.59%	11.68%	19.27%
PM peak	867	86	81	167	9.92%	9.34%	19.26%

**7003 - SR 10 (US 90) W. of Hickory**

	Total Veh.	Med. Trucks	Hvy. Trucks	Total Trucks	Med. Truck %	Hvy. Truck %	Total Truck %
Feb. 18							
AM peak	575	31	23	54	5.39%	4.00%	9.39%
PM peak	603	40	27	67	6.63%	4.48%	11.11%
Feb. 19							
AM peak	526	31	18	49	5.89%	3.42%	9.32%
PM peak	601	40	27	67	6.66%	4.49%	11.15%
Feb. 24							
AM peak	511	31	25	56	6.07%	4.89%	10.96%
PM peak	557	39	26	65	7.00%	4.67%	11.67%

**7004 - SR 57 (US 19) at 4-In divided S. of Monticello**

	Total Veh.	Med. Trucks	Hvy. Trucks	Total Trucks	Med. Truck %	Hvy. Truck %	Total Truck %
Feb. 18							
AM peak	797	86	42	128	10.79%	5.27%	16.06%
PM peak	818	40	28	68	4.89%	3.42%	8.31%
Feb. 19							
AM peak	814	70	47	117	8.60%	5.77%	14.37%
PM peak	789	31	24	55	3.93%	3.04%	6.97%

## 6.2 EXISTING LEVEL OF SERVICE ANALYSIS

The level of service was analyzed for roadway segments and for the roundabout intersection of SR 10 (US 90) and SR 57 (US 19). Level of Service analysis was conducted for existing conditions assuming no improvements to existing facilities.

### 6.2.1 Existing Roadway Segment Level of Service

Segments of SR 10 (US 90) and SR 57 (US 19) were analyzed using existing (2003) AADT volumes and the maximum service volumes from the tables in the FDOT Q/LOS Handbook. Table 6-2 presents the existing LOS analysis for the roadway segments, including number of lanes, facility type, length, LOS area, adopted LOS standard and maximum AADT. For all SR 10 (US 90) segments, the adopted LOS standard is C and existing levels of service are A or B with the exception of the segment from SR 57 (US 19) to Railroad Street, which is at LOS C. For SR 57 (US 19), the LOS standard is B for segments outside the City of Monticello and C for segments inside the city. Existing levels of service are all A, except for the two-lane segment from SR 10 (US 90) to Chestnut Street, which is at LOS C.

### 6.2.2 Existing Intersection Level of Service

The roundabout intersection of SR 10 (US 90) / SR 57 (US 19) was analyzed using the roundabout module in the Highway Capacity Software (HCS 2000) for unsignalized intersections. The turning movement volumes for the peak hours (am, mid-day and pm) were converted to passenger car equivalents (PCE's) by applying a factor of 1.5 to medium trucks and 2.0 to heavy trucks. The resulting PCE's were entered into HCS, which outputs an anticipated range of volume-to-capacity ratios for each approach. The higher v/c ratio in the range is more applicable for this project, since it represents expected operations where roundabouts are uncommon.

Printouts of the existing roundabout LOS analysis are included in Appendix D. Table 6-3 summarizes the results. The table shows that all v/c ratios are below .85, which is the highest acceptable v/c ratio for a roundabout approach. The existing intersection LOS is therefore acceptable.

**TABLE 6-2**  
**EXISTING LEVEL OF SERVICE**  
**SR 10 (US 90) and SR 57 (US 19) Segments**

<u>ROADWAY SEGMENT</u>	<u>NO.</u> <u>LNS.</u>	<u>FACILITY</u> <u>TYPE</u>	<u>LENGTH</u>	<u>LOS</u> <u>AREA</u>	<u>LOS</u> <u>STD</u>	<u>MAX</u> <u>AADT</u>	<u>COUNT</u> <u>STATION</u>	<u>EXISTING</u> <u>AADT</u>	<u>AVERAGE</u> <u>AADT</u>	<u>EXISTING</u> <u>LOS</u>
<u>SR 10 (US 90)</u>										
from Leon Co. line to W. city limits of Monticello	2	Undivided, uninterrupted	5.9 mi.	Rural Undev.	C	8600	540094 541501	3800 5300	4550	B
from W. city limits of Monticello to US 19	2	Undivided, uninterrupted	0.8 mi.	Rural Devel.	C	12700	7003	6500	6500	B
from US 19 to Railroad Street	2	Undivided, uninterrupted	0.3 mi.	Rural Devel.	C	12700	541505	7900	7900	C
from Railroad Street to E. city limits of Monticello	4	Undivided, uninterrupted	0.5 mi.	Rural Devel.	C	39710	541502	2600	2600	A
from E. city limits of Monticello to Madison Co. line	2	Undivided, uninterrupted	8.6 mi.	Rural Undev.	C	8600	541502 540105 7001	2600 2200 2700	2500	A
<u>SR 57 (US 19)</u>										
from Interstate 10 to S. city limits of Monticello	4	Divided, uninterrupted	3.4 mi.	Rural Undev.	B	28600	540102 541503	5900 6200	6050	A
from S. city limits of Monticello to E. of Martin Road	4	Divided, uninterrupted	0.7 mi.	Rural Devel.	C	41800	541503	6200	6200	A
from E. of Martin Road to US 90	4	Undivided, uninterrupted	0.9 mi.	Rural Devel.	C	39710	545006	10100	10100	A
from US 90 to Chestnut Street	2	Undivided, uninterrupted	0.5 mi.	Rural Devel.	C	12700	7005	9600	9600	C
from Chestnut Street to N. city limits of Monticello	4	Undivided, uninterrupted	0.3 mi.	Rural Devel.	C	39710	541504	6300	6300	A
from N. city limits of Monticello to Groveville Rd	4	Undivided, uninterrupted	0.4 mi.	Rural Undev.	B	27170	541504	6300	6300	A
from Groveville Rd to GA line	4	Divided, uninterrupted	7.1 mi.	Rural Undev.	B	28600	540002	4300	4300	A

**TABLE 6-3**  
**RESULTS OF US 90 / US 19 ROUNDABOUT ANALYSIS**  
**HIGHWAY CAPACITY SOFTWARE**  
**EXISTING CONDITIONS**

<u>EXISTING (2004)</u>	<u>V/C RATIO BY APPROACH*</u>			
	<u>Eastbound</u>	<u>Westbound</u>	<u>Northbound</u>	<u>Southbound</u>
<b>AM Peak</b>	.51 - .64	.52 - .64	.48 - .59	.66 - .81
<b>Mid-Day Peak</b>	.40 - .50	.44 - .55	.53 - .65	.49 - .60
<b>PM Peak</b>	.41 - .50	.46 - .57	.46 - .56	.46 - .56

\* HCS software generates two v/c ratios based on the range of estimated critical gaps and follow-up times. The higher v/c reflects the operation that might be expected until roundabouts become more common.

NOTE: .85 is the highest acceptable v/c ratio for a roundabout approach.

**TABLE 6-4**  
**FUTURE LEVEL OF SERVICE**  
**SR 10 (US 90) and SR 57 (US 19) Segments**

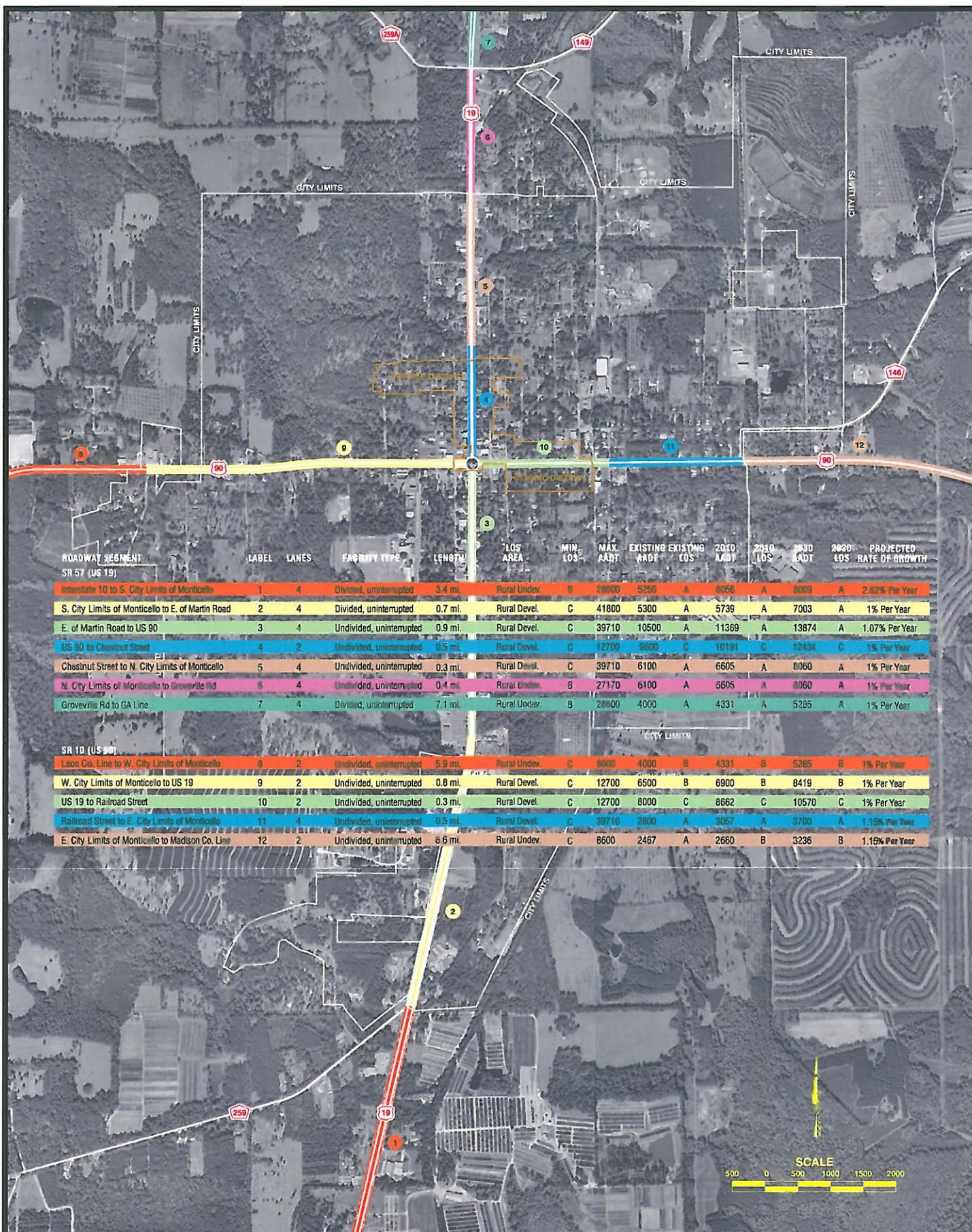
<u>ROADWAY SEGMENT</u>	<u>LOS</u> <u>STD</u>	<u>MAX</u> <u>AADT</u>	<u>COUNT</u> <u>STATION</u>	<u>2010</u> <u>AADT's</u>	<u>AVERAGE</u> <u>2010 AADT</u>	<u>2010</u> <u>LOS</u>	<u>2030</u> <u>AADT's</u>	<u>AVERAGE</u> <u>2030 AADT</u>	<u>2030</u> <u>LOS</u>
<u>SR 10 (US 90)</u>									
from Leon Co. line to w. city limits of Monticello	C	8600	540094 541501	4074 5682	4878	B	4971 6934	5953	C
from w. city limits of Monticello to US 19	C	12700	7003	6900	6900	B	8419	8419	B
from US 19 to Railroad Street	C	12700	541505	8470	8470	C	10335	10335	C
from Railroad Street to e. city limits of Monticello	C	39710	541502	2788	2788	A	3401	3401	A
from e. city limits of Monticello to Madison Co. line	C	8600	541502 540105 7001	2788 2359 2866	2671	B	3401 2878 3497	3259	B
<u>SR 57 (US 19)</u>									
from Interstate 10 to s. city limits of Monticello	B	28600	540102 541503	6660 6647	6654	A	9715 8111	8913	A
from s. city limits of Monticello to e. of Martin Road	C	41800	541503	6647	6647	A	8111	8111	A
from e. of Martin Road to US 90	C	39710	545006	10829	10829	A	13213	13213	A
from US 90 to Chestnut Street	C	12700	7005	10191	10191	C	12434	12434	C
from Chestnut Street to n. city limits of Monticello	C	39710	541504	6754	6754	A	8242	8242	A
from n. city limits of Monticello to Groveville Rd	B	27170	541504	6754	6754	A	8242	8242	A
from Groveville Rd to GA line	B	28600	540002	4610	4610	A	5625	5625	A

**TABLE 6-5**  
**RESULTS OF US 90 / US 19 ROUNDABOUT ANALYSIS**  
**HIGHWAY CAPACITY SOFTWARE**  
**PROJECTED CONDITIONS**

	V/C RATIO BY APPROACH*			
	<u>Eastbound</u>	<u>Westbound</u>	<u>Northbound</u>	<u>Southbound</u>
<b><u>2010</u></b>				
AM Peak	.55 - .69	.55 - .69	.52 - .64	<b>.71 - .88</b>
Mid-Day Peak	.44 - .54	.48 - .60	.58 - .70	.53 - .65
PM Peak	.44 - .55	.50 - .62	.49 - .60	.50 - .61
<b><u>2030</u></b>				
AM Peak	<b>.76 - .97</b>	<b>.74 - .92</b>	<b>.69 - .86</b>	<b>.96 - 1.20</b>
Mid-Day Peak	.59 - .74	.65 - .81	<b>.74 - .91</b>	<b>.70 - .86</b>
PM Peak	.59 - .74	.66 - .82	.63 - .77	.65 - .81

\* HCS software generates two v/c ratios based on the range of estimated critical gaps and follow-up times. The higher v/c reflects the operation that might be expected until roundabouts become more common.

NOTE: .85 is the highest acceptable v/c ratio for a roundabout approach.



**SR 57 (US 19)  
MONTICELLO  
BY-PASS  
STUDY**

**LEVEL OF SERVICE  
ANALYSIS RESULTS**

**FIGURE 6-1**

## 7.0 CORRIDOR ANALYSIS

A corridor analysis was performed to evaluate potential transportation improvement alternatives that meet the desired level of service while minimizing social, economic and environmental impacts. Alternatives considered generally fall into one of three categories:

- Operational and geometric improvement alternatives that evaluate the potential for access management, traffic operations, enhanced signing and pavement markings and intersection improvements to provide interim capacity and safety improvements along SR 57 (US 19).
- “Corridor-level” concepts for widening the existing SR 57 (US 19) roadway within the project limits and improving the geometry of the existing roundabout.
- “Corridor-level” concepts for alternative roadway corridors or one-way pairs that could help relieve truck conflicts, safety concerns, environmental concerns and capacity concerns resulting from the existing roadway configuration.

Improvement alternatives have been evaluated according to a set of evaluation criteria that considers travel service, impacts to natural, social and physical environment conditions and project cost. The alternatives considered in this section of the report are as follows:

1. “No Build”
2. Operational/Geometric Improvement to Existing Facility
3. Capacity Improvements to Existing Facility
4. Off-System Alternatives (Utilizing Existing Streets/Corridors)
  - A. Water Street 4-Laning
  - B. Waukeena Street 4-Laning
  - C. Mulberry Street 4-Laning
  - D. One-Way Pairs
5. By-Pass Alternatives (New Roadway Alignments)
  - A. Far West New Alignment
  - B. Near West New Alignment
  - C. East Long New Alignment
  - D. East Short New Alignment

## 7.1 NO BUILD ALTERNATIVE

The No Build alternative provides a baseline from which to measure the performance, costs and impacts of all alternatives. The advantages of the No Build alternative are:

- No construction costs
- No right-of-way costs, impacts or relocations
- No additional environmental impacts
- No disruption to businesses and residents during construction

The disadvantages of the No Build alternative are:

- Continuing decrease in level of service with eventual failing LOS at the roundabout within the design year
- Continued perceived or actual pedestrian safety issues
- Continued issue of citizen concerns about heavy truck traffic and noise in the downtown area
- Roadway segment does not meet FHHS (or possible SIS) criteria.

## 7.2 OPERATIONAL/GEOMETRIC IMPROVEMENTS TO EXISTING FACILITY

Operational and geometric improvement alternatives were analyzed to provide for potential interim improvements to SR 57 (US 19) in the immediate downtown Monticello area. The concept was to investigate potential operational and geometric improvement alternatives that would provide the potential for access management, traffic operations, enhanced signing and pavement markings and intersection improvements to provide interim capacity and safety improvements along SR 57 (US 19). It should be noted that none of the alternatives considered meet the design requirements for FHHS facilities and that these improvements are considered to be temporary or interim. The development of alternatives for operational and geometric improvements was restricted to the two-lane portion of SR 57 (US 19) from one block south to five blocks north of the roundabout. For the purposes of this evaluation it was assumed that the operational and geometric improvements would exclude the addition of capacity lanes since that alternative is being evaluated separately (see Section 7.3).

The primary evaluation elements for consideration of potential improvements were the historical crash data and the traffic level of service analysis. Analysis of the crash data identifies segments or intersections exhibiting high crash concentrations, indicating the possible need for operational improvements. Pedestrian crashes are also considered since the character of the downtown area is commercial and the location of the Courthouse in the middle of the roundabout requires frequent pedestrian crossings. Analysis of the traffic level of service for this segment of roadway and for the major intersection (the roundabout) identifies the potential need for capacity improvements and may indicate specific traffic constraints.

The crash data for SR 57 (US 19) for this segment has been plotted on Figure 4-6. Although the traffic count data recorded a relatively high number of pedestrian movements at the roundabout (285 in 8 hours) and in the downtown area, there does not appear to be any significant concentrations of crashes within the two lane area and this area does not indicate a significantly higher general crash rate than the remainder of the corridor. The lack of crash concentrations within this segment indicates that little or no safety benefit would be gained from operational improvement alternatives. The crash data also indicates only one recorded pedestrian crash within the study period. This may be partly due to the generally low operating speeds experienced in the area. Operational and geometric improvements may lead to increased operating speeds and potential for increased pedestrian conflicts.

The level of service analysis indicates that given the relatively low historical traffic growth rate, the level of service will remain acceptable for the segment throughout the design period; however, the level of service for the roundabout will degrade to an unacceptable level within the design period. This constraint leads us to investigate operational and geometric improvements that may be accomplished within the roundabout to increase level of service. The level of service for the intersection is degraded primarily due to the large volume of truck traffic moving north and south on SR 57 (US 19). Large trucks must negotiate the roundabout at a low speed due to the geometric constraints and therefore significantly lowers the capacity of the intersection. The geometric constraints are most significant in the southbound direction on SR 57 (US 19) where the turning movement from the roundabout onto southbound SR 57 (US 19) is constrained by a large historic oak tree in the southwest quadrant. Since this tree is significant to the community in terms of historic importance, removing the tree was not considered.

An analysis of the existing roadway geometry for this southbound movement has been performed using the base survey and roadway drawing files for the most recent resurfacing project (219448-1-52-01). As shown on Figure 7-1, the turning template for a WB-67 truck has been developed for the analyzed turn movement using Autoturn 5.0. The critical turning radius is approximately 50 feet resulting in a theoretical design speed of approximately 22 mph. The truck has difficulty negotiating the turn to the right without overrunning the inside of the roundabout with the rear tires or steering into the oncoming traffic lanes with the front wheels. This maneuver requires a very low operating speed, which degrades the intersection capacity.

A proposed geometric improvement for this constrained movement is shown in Figure 7-2. The traffic island on the south leg of the intersection as well as the northbound travel lane has been shifted to the east by approximately 12 feet. This results in a larger effective turning radius (approximately 90 feet) for the right turn movement resulting in a theoretical design speed of 29 mph. This geometric improvement can be accomplished by removing and replacing the traffic striping from the south end of the roundabout to approximately 1000 feet to

the south to transition the travel lanes to the east. The relocation of the existing striped traffic island will require the relocation of several traffic signs presently located in the island.

As indicated on Figure 7-2, to achieve the full benefit of this improvement, the south and west portion of the interior curbing of the roundabout must be removed and replaced to allow for minor roadway widening in that area. The maximum additional widening width is approximately 1.5 feet.

The cost for the striping improvement is considered to be very low and may be performed as incidental to the next resurfacing project in the area. The cost for the curb relocation and minor widening is estimated to be approximately \$25,000. The relocation of the curb will alter the symmetry and appearance of the Courthouse yard and is considered as a negative impact to this historic property.

### 7.3 CAPACITY IMPROVEMENTS TO EXISTING FACILITY

An analysis for capacity improvements or the four-laning of the existing SR 57 (US 19) roadway alignment has been developed for consideration as an option for the capacity improvements necessary to maintain an acceptable level of service for the design year and the design speed required to comply with FHHS standards. To meet FHHS criteria for an urbanized area, the analysis considers a four-lane urban typical section to be constructed along the existing route for the 2.06 mile segment from MP 8.81 (south of the Winn Dixie shopping plaza) to MP 10.87 (intersection with CR 149).

*Engineering:* The four-laning concept developed for this analysis is for a four-lane urban typical section as shown in Figure 5-1. This typical, with a 22 foot wide median, has a design speed of 50 mph as required for the FHHS in an urbanized area and must have a posted speed of no greater than 45 mph. For this analysis the existing roundabout at the intersection of SR 57 (US 19) and SR 10 (US 90) is eliminated by relocating the Courthouse to another location to allow for the construction of a standard at-grade intersection. This approach has the least impact on the downtown business and provides for a safer intersection of these two roadways as opposed to a multilane roundabout option. Although the relocation of the Courthouse is seen to be a significant disruption to the character of Monticello, when compared to providing for safe pedestrian access within a multi-lane roundabout with much higher operating speeds and the associated significant impacts to the adjacent parcels (including the historic opera house), it is determined to be the better of the two options.

The typical section requires a minimum of 106 feet of right-of-way and therefore impacts parcels throughout the 2.06 miles of roadway widening. The lands impacted by the corridor are primarily commercial and mixed-use suburban/residential. It is estimated that 123 parcels would be impacted and that 11 residential relocations and 11 commercial relocations would be required. The commercial relocations would include two blocks in the central downtown

business district severely disrupting the community cohesion and character.

*Environmental/Cultural:* Since this alignment impacts the downtown commercial and historical district, there would be significant anticipated impacts to community facilities. Assuming that pond sites could be located on low value parcels, there are four (4) anticipated community facility relocations (post office, 2 churches and the Courthouse), six (6) potential Historic / Archaeological site impacts and six (6) public lands / recreation areas impacts (or potential Section 4 (f) involvements). The total additional land area (upland) impacted for this alignment would be approximately 6 acres. Wetland impacts would be negligible.

Potential involvement with Threatened and Endangered (T&E) Species would be considered "low" due to the developed nature of the existing corridor. No T&E species (plant or animal) or other Species of Special Concern were observed during field reviews. Seven (7) potential contamination sites could be impacted within the alignment, chiefly existing or abandoned service stations. Sixteen (16) potential noise sensitive sites would be located within 300 feet of the proposed alignment. Detailed noise modeling was not conducted, but once completed; many sites may not warrant noise abatement.

*Summary:* Based on the initial evaluation conducted for this potential alignment corridor, the potential for impacts to businesses and homes in the downtown and historic district as well as the right-of-way costs and cultural impacts of relocating the Courthouse effectively eliminate this option from further analysis.

#### 7.4 OFF-SYSTEM ALTERNATIVES

Off-system alternative corridors were developed to take advantage of existing right-of-way and roadway facilities in the immediate downtown Monticello area. The concept was to divert thru-traffic off of existing SR 57 (US 19) in the central business district. This would be done by utilizing the existing grid of city streets.

In the initial planning stages, four separate alternatives were developed through the studying of maps, aerial photographs and site visits. These alternatives are shown in Figures 7-3 and 7-4. The alignments and cross sections were developed under the surmise that FHHS design standards would not be required for the off-system alternatives and that these alternatives would be considered as interim improvements. None of these alternatives meet the design speed requirements for minimum degree of curve for horizontal curves. Constraints of the off-system alternatives are discussed at the end of this section.

Alternative 4A – Water Street 4-Laning: This corridor alignment will be a five-lane urban facility with a design speed less than 40 mph. Northbound traffic on SR 57 (US 19) is routed west onto Seminole Avenue at a signalized intersection, turning north onto Water Street continuing across SR 10 (US 90). The alignment turns east onto York Street. At a signalized intersection, traffic is returned to northbound SR 57 (US 19). The two-lane portion of SR 57 (US 19) north of this

alignment would be widened to four-lanes. Local traffic on SR 57 (US 19) and SR 10 (US 90) would be permitted to continue on the existing facilities for access to the business district.

Alternative 4B – Waukeena Street 4-Laning: At a signalized intersection, northbound traffic is routed west onto Anderson Street for one block, then north onto Mulberry Street. Traffic continues north, through a signalized intersection at SR 10 (US 90) and turns east on to Madison Street. At a signalized intersection, traffic is returned to northbound SR 57 (US 19). This new facility will be a five-lane urban section with a design speed less than 40 mph. The two-lane portion of SR 57 (US 19) north of this alignment would be widened to four-lanes. Similar to Alternative 4A, local traffic on SR 57 (US 19) and SR 10 (US 90) would be permitted to continue on the existing facilities for access to the business district.

Alternative 4C – Mulberry Street 4-Laning: Northbound traffic on SR 57 (US 19) is routed to the east on to Seminole Avenue. A signalized intersection would be provided to allow local traffic to continue on existing SR 57 (US 19). From Seminole Avenue traffic will be routed north onto Waukeena Street, continuing north through a signalized intersection at SR 10 (US 90). North of SR 10 (US 90) traffic continues north to Madison Street. At Madison Street traffic is routed west and then north onto SR 57 (US 19) at a signalized intersection. This facility will be a five-lane urban section with a design speed less than 40 mph. The two-lane portion of SR 57 (US 19) north of this alignment would be widened to four-lanes. Similar to other off-system alternates, local traffic on SR 57 (US 19) and SR 10 (US 90) would be permitted to continue on the existing facilities for access to the business district.

Alternative 4D – One-Way Pairs: All northbound traffic on SR 57 (US 19) is routed east onto Palmer Mill Road, two blocks south of the roundabout. Two blocks east traffic turns north onto Waukeena Street, crossing SR 10 (US 90) and traveling five blocks before turning west onto Madison Street. At the intersection of Madison Street and SR 57 (US 19) northbound traffic would be returned to SR 57 (US 19). From the north, all southbound traffic is routed west onto Madison Street for one block. Traffic then turns south onto Mulberry Street, crossing SR 10 (US 90). At Palmer Mill Road traffic turns west. At the intersection of Palmer Mill Road and SR 57 (US 19), traffic returns southbound on SR 57 (US 19). All off system roadways would be improved to serve as one-way two-lane facilities with a design speed less than 40 mph. The two-lane portion of SR 57 (US 19) north of this alignment would be widened to four-lanes. Intersections at SR 57 (US 19) and SR 10 (US 90) would be signalized.

Many challenges arose during the analysis of these alignments. All four alignments share similar challenges. The first and most limiting is the design speed requirement. Since SR 57 (US 19) is part of the FIHS. The required design speed is 50 mph within an urban area. As presented previously in Table 5.1, the minimum degree of curve for a 50 mph design speed is 2° 0' with a normal crown, 4° 45' with a reverse crown and 6° 30' with a maximum

superelevation of 5.0%. This equates to horizontal curve radii of 2865 feet, 1206 feet and 880 feet respectively. 880 feet is nearly four city blocks therefore, each curve would require a very large number of parcel takes. Geometry of this nature within a developed urban area is not feasible due to the magnitude of the impacts it would require. A curve radius of this size would also not allow for superelevation transition lengths.

The second challenge is the historic district and the number of historic structures located within it. Several existing features controlled the possible locations of off-system alternatives. The northeastern quadrant is limited to the north by the Old Cemetery dating from 1827. Also located in this quadrant are two churches dating from 1841 and 1885. The northwest quadrant is limited to the north by the historic Madison Street residential area. Two of the more notable homes on this street are the Bailey-Brinson House (c. 1880) and the Turnbull-Evans House (c. 1880). The southwest quadrant is the most challenging quadrant. It is limited to the west by the former Jefferson High School. This school was replaced this year by a new high school located on SR 57 (US 19) south. However, the existing buildings will be utilized by the Jefferson County School Board, various Jefferson County services and the Jefferson County Library. The original historic Jefferson County High School, constructed in 1852 is located adjacent to the former high school. Also located in this quadrant are three churches, one dating from 1888, along with City Hall, the police station and the Monticello Opera House (c. 1890). The southeast quadrant contains Howard Middle School. Finally, most commercial building in the historic district date for the last quarter of the 19<sup>th</sup> century. According to information from the State Historic Preservation Office (SHPO), 541 historic structures are present within the project limits, predominantly within the city limits.

The town of Monticello has a diverse mix of business and residential areas in the small downtown area. There is no possible alignment to minimize residential, business and government impacts and meet the required design speed. Most of the property impacts may be to historic structures. From an environmental standpoint, a large number of possible contamination sites are located in the downtown area. Additionally, there will be large numbers of noise sensitive sites impacted. For these reasons, all off-system alternative corridors are being removed from further consideration.

## 7.5 BY-PASS ALTERNATIVES

The four alignments developed for consideration are shown in Figure 7-5 and 7-6. Figure 7-5 shows the study alignments used for the quantitative and qualitative matrix evaluation. Alignments are represented by a 250-foot corridor and are a first attempt to minimize potential impacts. This is wider than required and shown in the four-lane typical section. The 250-foot corridor was used to account for additional right-of-way that may be required for the use of stormwater treatment, pond sites and possible interchanges at the termini. The required right-of-way for a six-lane facility would be 224-feet with no allowance for pond

sites or stormwater treatment. Figure 7-6 shows the study corridors developed in the initial stages of the study. Within each corridor, several alignments are possible to utilize existing right-of-way or property boundaries. Corridor widths depicted are 1000 feet for Alternatives 5A and 5B, 3000 feet for Alternative 5C, and 2000 feet for Alternative 5D. The smaller corridor widths indicate a more natural alignment option.

The geometry of termini at the beginning and end of the by-pass alignments was beyond the scope of this report. However, preliminary discussions were started with both Central Office and District Three planning staff regarding termini preferences. The preferred termini at the intersection of the by-pass and existing SR 57 (US 19) would be an interchange, with the intent being to maintain Average Through Speeds as part of the FHHS minimum standards.

#### Alternative 5A – Far West New Alignment

*Engineering:* This corridor alignment is to the west of Monticello, generally following an abandoned railroad corridor. It consists of a rural, four lane divided typical section along its entire length. Northbound traffic on SR 57 (US 19) will be routed onto the new four-lane facility at the intersection CR 158. The new alignment will then traverse to the west along the abandoned railroad corridor, currently owned by Progress Energy. The corridor makes a wide sweeping turn to the north and crosses SR 10 (US 90) approximately 2.1 miles from the Monticello Courthouse. The new alignment then continues north along existing New Monticello Road, currently a dirt road paralleling the rail corridor. The alignment parts from the rail corridor, curving to the east and utilizing the existing right-of-way along West Lake Road. Near the intersection of West Lake Road and Lake Road, the new facility continues eastward to rejoin SR 57 (US 19) approximately 1.1 miles north of the Courthouse. Intersections at SR 57 (US 19) and SR 10 (US 90) will be signalized. The overall length of this corridor alignment is 6.94 miles.

This alignment minimizes the number of impacts to parcels by taking advantage of the abandoned rail corridor owned by Progress Energy and existing county right-of-way. The lands impacted by the corridor are primarily agricultural, low-density residential and mixed-use suburban/residential.

*Environmental/Cultural:* Since this alignment passes through lands that are currently very rural, there would no anticipated impacts to community facility relocations, potential Historic / Archaeological site impacts, public lands / recreation areas, or potential Section 4 (f) involvement. The total area impacted (wetland and upland) for this 250-foot wide corridor would be approximately 210 acres. Wetland impacts would be approximately 83 acres. The wetland acreage was calculated from the hydric soils data overlay only. Therefore, actual impacts to wetlands could vary slightly from this initial estimate.

Potential involvement with Threatened and Endangered (T&E) Species would be

considered “medium” due to the impacts to farmland and undeveloped forested areas. Of the alignments considered, this alternative has the greatest potential for impacts to forested areas, which could provide habitat, cover and foraging area for many mammals. No T&E species (plant or animal) or other Species of Special Concern were observed during field reviews.

Two (2) potential contamination sites could be impacted within the alignment. These include the Jefferson County Recycle facility along the railroad alignment north of SR 10 (US 90) and what appears to be an abandoned convenience store or service station south of West Lake Road. Since the majority of this alignment follows the abandoned railroad corridor, arsenic and other contamination in soil and/or groundwater are potential concerns.

Thirty-three (33) potential noise sensitive sites could be located within 300 feet of the proposed alignment. All of the potential receivers are single-family dwellings. Detailed noise modeling was not conducted, but once completed, many sites may not warrant noise abatement.

*Summary:* Based on the initial evaluation conducted for this potential alignment corridor, Alternative 5A involves:

- A western alignment that extends 2.1 miles west of the Courthouse Square and utilizes the abandoned railroad corridor. The by-pass route would be 2.4 miles longer than the existing route.
- No anticipated community facilities relocations, potential Historic / Archaeological sites impacts, public lands / recreation areas impacts, or Section 4 (f) properties involvement.
- Second greatest overall right-of-way impacts, 210 acres.
- Greatest amount of wetland impacts, 83 acres.
- “Medium” likelihood of potential T&E species involvement, the greatest amount of potential contamination impacts based on the length of the railroad corridor followed and the second greatest number of potential noise receiver sites (33 sites).

#### Alternative 5B – Near West New Alignment

*Engineering:* This corridor alignment is to the west of Monticello on a new alignment. The typical section consists of a rural, four-lane divided section for most of its length. Northbound traffic on SR 57 (US 19) is routed to the west onto a new four-lane facility south of the Winn Dixie shopping center. At this location existing SR 57 (US 19) is transitioning from a rural four-lane divided highway to a five-lane urban section. The corridor sweeps northward, minimizing the number of parcel impacts and staying largely within the city limits. The new facility

crosses SR 10 (US 90) approximately one half mile west of the Courthouse, at the western edge of the residential downtown area. The corridor continues to the north, and then curves to the east to rejoin SR 57 (US 19) at the intersection SR 57 (US 19) and CR 149. This location is where SR 57 (US 19) becomes a rural four-lane divided section. The intersections at SR 57 (US 19) and SR 10 (US 90) will be signalized and allow local access to the business district. The overall length of this corridor alignment is 2.47 miles.

This relatively short alignment is located mostly inside the city limits and has a minimal number of parcel impacts. Parcel tax data indicates that a large portion of the land within this corridor is held by a small number of individuals. Land uses are mostly agricultural, with some low-density residential and mixed-use business/residential.

*Environmental/Cultural:* With the corridor remaining close to the town, it is slightly more urban than the other three (3) alternatives. The Jefferson County Health Department has a facility very near the western edge of the alignment. A dentist's office is located east of and adjacent to the alignment. It appears there would be no community relocations or potential Historic / Archaeological site impacts. The alignment would impact a city-owned parcel on the north side of SR 10 (US 90) that contains a WW-II Iwo Jima Memorial. While this one property introduces the potential for Section 4(f) involvement, it is not anticipated that the Determination of Applicability would find the impacts significant, as they would not affect the use of, or access to this property.

The total area of ROW impacts would be approximately 74 acres of which approximately 24 acres are wetlands. The potential for T&E species impacts would likely be considered "low" since this area is urban in nature. No T&E species (plant or animal) were observed during field surveys.

Three (3) potential contamination sites are located very near the alignment. These include the Jefferson County Roadway Department facility, Jefferson County Fire and Rescue and an old FDOT maintenance yard. All are near the southern terminus of the corridor alignment. Based on the type of operations present at these locations, there is a fair possibility of potential contamination at these sites.

Two (2) potential noise receptor sites are located along the alignment. Both are single-family dwellings, one behind the Winn-Dixie plaza and the other near the northwest portion of the alignment.

*Summary:* Based on the initial evaluation conducted for this potential alignment corridor, Alternative 5B involves:

- A western alignment that extends 0.5 miles west of the Courthouse, staying mostly within the Monticello city limits. The by-pass route would be 0.5 miles longer than the existing route.

- No community facilities relocations or potential Historic / Archaeological sites impacts. One (1) parcel that could potentially involve Section 4(f) issues.
- Least overall ROW impacts, 74 acres.
- Second least wetland impacts, 24 acres.
- “Low” likelihood of T&E species involvement, the second highest number of potential contamination sites (3 sites) and the least amount of potential noise receiver sites (2 sites).

#### Alternative 5C – East Long New Alignment

*Engineering:* This corridor alignment by-passes Monticello to the east on a new alignment consisting of a four lane rural divided typical section along its entire length. The new alignment begins at the intersection of SR 57 (US 19) and CR 158, utilizing the existing CR 158 and abandoned rail corridor for the first mile. The alignment then sweeps widely to the north crossing SR 10 (US 90) approximately 1.5 miles east of the Courthouse. The alignment will utilize existing easements and right-of-way to minimize parcel impacts and ROW cost. The corridor continues north and sweeps back to the west to rejoin SR 57 (US 19) north of CR 149, approximately 4.5 miles north of the Courthouse. The intersections at SR 57 (US 19) and SR 10 (US 90) will be signalized and allow local access to the business district. The overall length of this corridor alignment is 7.79 miles.

The southern portion of this corridor alignment is through agricultural areas with several commercial nurseries. The northern portion of the corridor is also agricultural with several pockets of low-density residential and mixed-use suburban/residential uses.

*Environmental/Cultural:* This alignment is the longest in overall length, traversing larger rural/agricultural areas containing pine plantations, nurseries, farmlands and scattered wetlands. The total area of ROW impacts would be approximately 235 acres of which approximately 32 acres would be wetlands. There would be no community facilities relocations or impacts to public lands / recreation areas. The potential for impacts to the Trelawn Plantation near the southern end of the alignment may involve Section 4(f). The Trelawn Plantation is a historic plantation and home established in the mid-1800’s.

The potential for T&E species impacts would be considered “low” because of the large areas where farming activities occur. No T&E species (plant or animal) were observed during field surveys.

Four (4) potential contamination sites were identified in the evaluation of this corridor. These include one (1) former service station, two (2) sites associated with a forester’s facility and one (1) storage tank at a farm. A short section of this

alignment would utilize part of the abandoned railroad corridor and could involve similar issues as with Alternative 5A, such as arsenic and other soil/groundwater issues.

Twenty-three (23) potential noise sensitive sites exist within 300 feet of this alignment. Of these, twenty-two (22) were single-family dwellings and the other was a church. Because of the rural nature of this alignment, the potential noise receiver sites are scattered along the alignment, predominantly the northern half.

*Summary:* Based on the initial evaluation conducted for this potential alignment corridor, Alternative 5C involves:

- An eastern alignment that extends 1.5 miles east of the Courthouse. This bypass route would be 2.1 miles longer than the existing route.
- No community facilities relocations, one (1) potential Historic site impact (tied with Alternative 5B), no public lands / recreation areas impacts, one potential Section 4(f) property impact (tied with Alternative 5B).
- The largest overall ROW impacts, 235 acres.
- Second highest wetland impacts, 32 acres.
- “Low” likelihood of T&E species involvement, the most individual potential contamination sites (4 sites), including some abandoned railroad right-of-way and the second least number of potential noise receptor sites (23 sites).

#### Alternative 5D – East Short New Alignment

*Engineering:* The majority of this alignment overlaps with the Alternative 5C. The primary difference is that this alternative diverts from SR 57 (US 19) approximately two miles south of the Courthouse, instead of further south as in the previous alternative. This corridor also utilizes the abandoned rail corridor, skirting the eastern city limits and joining the above-described alignment for Alternative 5C approximately 0.5 miles south of SR 10 (US 90). The overall length of this corridor alignment is 6.17 miles.

*Environmental/Cultural:* The Alternative 5D alignment would have basically the same types of rural impacts as Alternative 5C. There would be no community facility relocations and no potential Historic / Archaeological sites impacts. Impacts to a planned Rails to Trails facility introduces the potential for Section 4(f) involvement.

The total area of ROW impacts would be approximately 186 acres, of which approximately 13 acres would be wetlands. The potential for T&E species impacts would be considered “low” because of farming activities. No T&E species (plant or animal) were observed during field surveys.

Two (2) potential contamination sites were observed. These include a propane facility near the southern terminus and a storage tank at a farm to the north.

Thirty-five (35) potential noise sensitive sites exist within 300 feet of this alignment. Thirty-four (34) are single-family dwellings and one (1) is a church. Fifteen (15) are located relatively close together near the southern terminus, with the remainder widely scattered along the northern portion of the alignment.

*Summary:* Based on the initial evaluation conducted for this potential alignment corridor, Alternative 5D involves:

- An eastern alignment that extends 1.5 miles east of the Courthouse. This bypass route would be 2.0 miles longer than the existing route.
- No community facilities relocations, potential Historic / Archaeological site impacts, public lands / recreation areas impacts. One (1) potential Section 4 (f) properties impact.
- The second lowest ROW impacts, 186 acres.
- The least wetland impacts, 13 acres.
- "Low" likelihood of T&E species involvement, the least number of potential contamination sites (2 sites) and the largest number of potential noise receiver sites (35 sites).

## 7.6 VIABLE ALTERNATIVES CONSIDERED FOR FURTHER STUDY

As a result of the corridor analysis two options are being rejected as viable alternatives. The four-laning of SR 57 (US 19) with 123 parcel impacts, relocation of the historic Jefferson County Courthouse and negative impacts to community cohesion and character make this an unrealistic alternative. All four off-system alternatives are also rejected from further consideration. None of these meet the required design speed and have unacceptable impacts to residents, businesses, community facilities and historic sites.

Operational and geometric improvements to the existing facility and all four by-pass corridors are viable alternatives for further study. The operational and geometric improvements to SR 57 (US 19) alternative is the least expensive and has the least amount of impacts. However, this alternative does nothing to meet the FIHS and SIS design criteria or alleviate the traffic and safety concerns of the community related to truck traffic in the downtown area. Of the four by-pass alternatives studied, Alternative 5B, Near West, has the least overall impacts and the least cost.

## 7.7 EVALUATION MATRIX

A summary of the alternatives evaluated is presented in Table 7-1. Project costs were calculated based on 2002 Transportation Costs from FDOT's Office of Policy Planning and adjusted to 2004 dollars.

The evaluation of the four by-pass alignments is based on a 250-ft corridor. This is wider than required and shown in the four-lane typical section. The 250-foot corridor was used to account for additional right-of-way that may be required for the use of stormwater treatment, pond sites and possible interchanges at the termini. The required right-of-way for a six-lane facility would be 224-feet.

Monticello Bypass Corridor Study  
Evaluation Matrix  
Table 7-1

Evaluation Measure																					
No Build		Non-Capacity Improvements		Capacity Improvements		Water St. 4-Laning		Waukeena St. 4-Laning		Mulberry St. 4-Laning		One-Way Pairs		Far West New Alignment		Near West New Alignment		East Long New Alignment		East Short New Alignment	
1	2	3	4A	4B	4C	4D	5A	5B	5C	5D											
Travel Service (Yes or No)																					
N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Improves LOS on US 19 (Design Year 2030 Condition)																					
N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Improves LOS on US 90 (Design Year 2030 Condition)																					
N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Improves Operational Condition of Traffic Circle																					
N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Reduces Truck Traffic in Downtown Area (Yes, No)																					
N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Improves Mobility for Non-Motorized Modes in Downtown Area (Bikes/Peds)																					
N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Effective Length of Bypass (bypass length - existing length) (miles)																					
-	-	-	0.25	0.16	0.07	0.15	2.42	0.51	2.09	1.98											
Consistent with FHIS Criteria																					
N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
Consistent with Future/Emerging SIS Criteria																					
N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
Consistent with City/County Comprehensive Plan																					
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y											
Social/Cultural Impacts (Number of)																					
0	0	11	15	15	10	2	13	2	19	16											
Potential Residential Relocations																					
0	0	11	1	2	5	5	0	4	0	2											
Potential Business Displacements																					
0	0	123	22	29	29	19	42	16	79	74											
Potential Parcels Impacted																					
0	0	4	0	0	3	0	0	0	0	0											
Potential Community Facilities Relocations																					
0	0	6	3	4	5	5	0	0	1	0											
Potential Historic/Archaeological Sites																					
0	0	0	2	0	2	0	0	1	0	1											
Public Lands/Recreation Areas																					
0	0	0	3	0	3	3	0	0	1	0											
Potential Section 4(f) Properties																					
0	0	6	3	0	3	0	0	0	1	0											
Affects on Community Cohesion (High, Medium, Low)																					
L	L	H	H	H	H	H	L	M	L	L											
Preserves Community Character (High, Medium, Low)																					
L	L	H	H	H	H	H	L	M	L	L											
Natural Environment Impacts																					
Wetland Habitat (Acres) (Estimated)																					
0	0	0	-	-	-	-	83	24	32	13											
Upland Habitat (Acres) (Estimated)																					
0	0	0	-	-	-	-	127	50	202	173											
Potential Threatened and Endangered Species (High, Medium, Low)																					
L	L	L	-	-	-	-	M	L	L	L											
Physical Environment Impacts (Number of)																					
Potential Contamination Sites																					
0	0	7	0	2	3	2	2	3	4	2											
Potential Noise Sensitive Sites (ie: Residential, Religious Institutions, Medical Facilities)																					
0	0	16	24	34	13	24	33	2	23	35											
Potential Railroad Crossings																					
0	0	0	0	0	0	0	0	0	0	0											
Potential Utility Relocations (High, Medium, Low)																					
0	0	H	H	H	H	H	L	L	L	L											
Constructability/Maintenance of Traffic (High, Medium, Low)																					
-	M	L	L	L	L	L	H	H	H	H											
Project Cost (millions; 2004 \$)																					
(1) Engineering (Preliminary Engineering, CEI, and ROW Support) (2 Lanes)																					
\$ -	\$ 5,000	-	-	-	-	-	\$ 5,977,000	\$ 2,203,000	\$ 6,665,000	\$ 5,306,000											
(2) Right-of-Way Acquisition (number of parcels, appraised value per sq. ft. per land type)																					
\$ -	\$ -	-	-	-	-	-	\$ 7,373,000	\$ 2,682,000	\$ 8,228,000	\$ 6,539,000											
(3) Construction - 2 Lanes																					
\$ -	\$ 20,000	-	-	-	-	-	\$ 16,603,000	\$ 6,121,000	\$ 18,513,000	\$ 14,739,000											
(3) Construction - 4 Lanes																					
\$ -	-	-	-	-	-	-	\$ 24,577,000	\$ 8,939,000	\$ 27,426,000	\$ 21,797,000											
Environmental Mitigation (To be completed in Phase II)																					
TOTAL PROJECT COST (2 Lanes)																					
\$ -	\$ 25,000	-	-	-	-	-	\$ 29,953,000	\$ 11,006,000	\$ 33,406,000	\$ 26,584,000											

(1) Preliminary Engineering costs estimated at 36% of Roadway Construction Cost  
(2) Based on 250 foot Corridor  
(3) Includes roadway, structures, drainage, signing, marking, traffic control and maintenance of traffic, aesthetics, etc.

## 7.8 RESULTS OF PUBLIC INVOLVEMENT PROGRAM

A series of public workshops and agency coordination meetings were held over the course of the Corridor Study in order to incorporate local input and participation in the development of alternatives.

Kickoff meetings were held separately for the Monticello City Council and the Jefferson County Commission. On March 2, 2004, a project overview was presented to the City Council as an agenda item at their regularly scheduled meeting. On March 18, 2004, a similar project overview was presented to the Jefferson County Commission as an agenda item at their regularly scheduled meeting.

An informal public meeting was held for the SR 57 (US 19) Corridor Study on May 13, 2004, from 5:30 PM to 7:00 PM, in the Monticello Opera House. A total of 49 persons signed the meeting register. The meeting was broken into an informal public viewing session with individual assistance to answer questions provided by project planners and engineers together with FDOT staff and a recorded narrated PowerPoint presentation on a continuous loop. The focus of the meeting was to outline the corridor study process and report on existing conditions. Written public comments were solicited and comments cards provided. 15 comment cards were received.

On December 9, 2004, at 8:00 PM, a workshop was held for a joint session of the Jefferson County Planning Commission and the Monticello Local Planning Agency. The workshop was held as an agenda item at the conclusions of the Jefferson County Planning Commission's regularly scheduled meeting in the Jefferson County Courthouse Chambers. The workshop was started with a presentation of the findings of the corridor study. The presentation was intended to be a summary of the corridor study discussing the needs for improvement, existing conditions, design criteria, traffic analysis, and project alternatives. At the conclusion of the presentation an extended question and answer session was conducted between the local planning officials and the project planners, engineers and FDOT staff.

A second public meeting was conducted on December 14, 2004, from 5:30 PM to 7:00 PM, in the Monticello Opera House. A total of 62 persons signed the meeting register. The initial phase of the meeting was an informal open house lasting from 5:30 PM to 6:00 PM and consisted of a public viewing of project display boards, aerial maps and a draft Corridor Report with individual assistance to answer questions provided by project planners and engineers together with FDOT staff. At 6:00 PM, a 20-minute project overview slide presentation was given. The remainder of the public meeting was an informal viewing of the project display boards, aerial maps and a draft Corridor Report, with staff on hand to answer questions. Written public comments were solicited and comments cards provided. 13 comment cards were received. Comments were mixed with no clear consensus for or against a by-pass. Those in favor of a by-

pass tended to favor the western alignments.

## 7.9 ALTERNATIVE FEASIBILITY

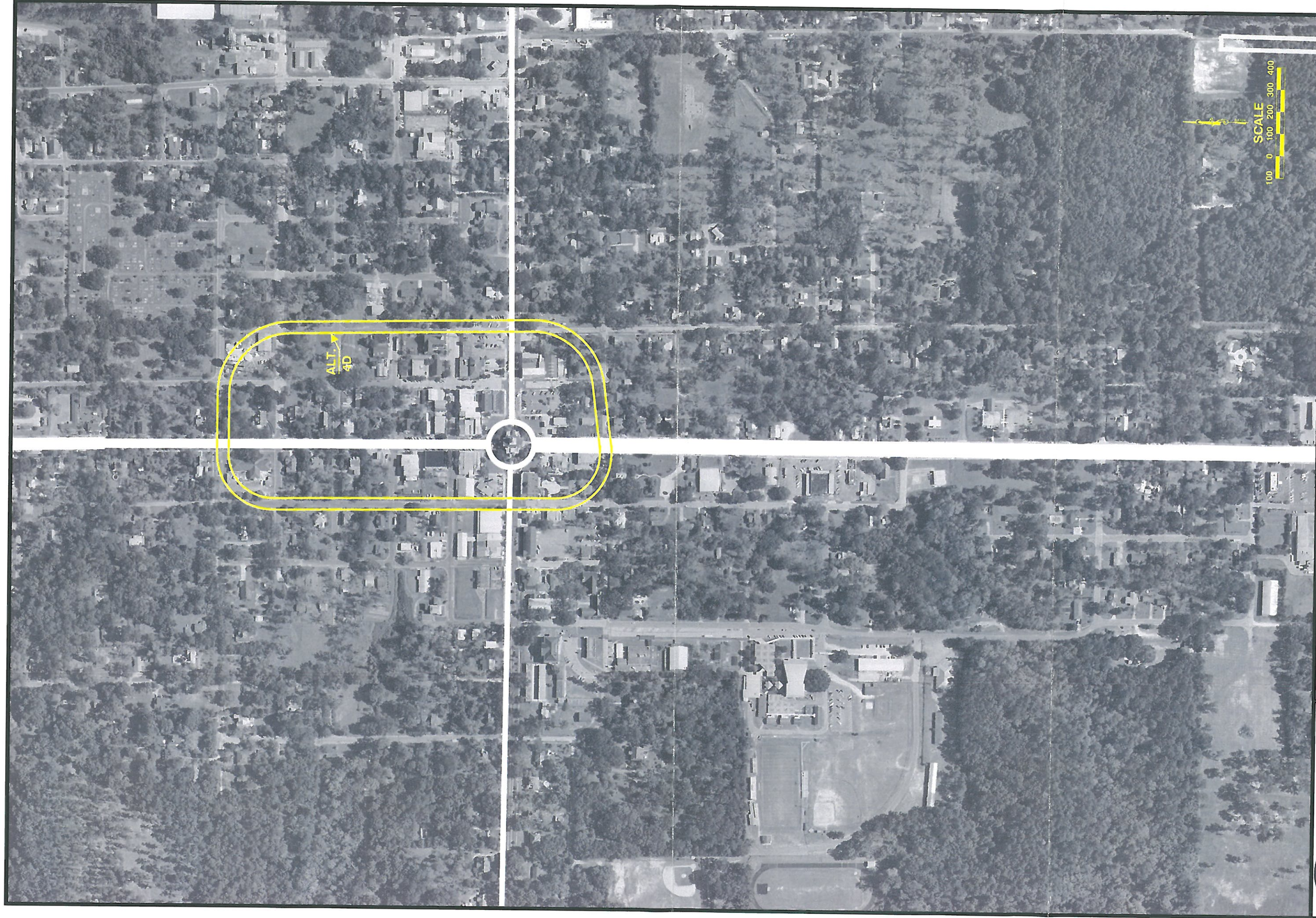
Of the array of alternatives considered, two classes of alternatives were considered viable for further study. These are operational/geometric improvements to the existing facility and three of the four by-pass alternatives (5A, 5B and 5C).

The operational/geometric improvements do not meet the FHHS or SIS design criteria and do not alleviate the heavy truck traffic from the downtown area. However, the traffic analysis does indicate that improvements to the roundabout will be warranted by 2010 due to insufficient capacity. Increasing the turning radius from 50 feet to 90 feet will increase the theoretical design speed from 22 mph to 29 mph. The improvements to the roundabout are considered an interim improvement until an eventual by-pass is constructed.

To meet Florida's Strategic Intermodal System (SIS) Plan requirements, a by-pass will be required in the future to maintain consistency with the State's transportation plan. SR 57 (US 19) is listed as an Emerging Corridor on the SIS plan. The traffic analysis conducted for this study does not demonstrate a deficiency in level of service through the design year of 2030.

The by-pass alternatives should be carried forward into the Stage 2 PD&E Study. One modification to Alternative 5A offered at the final public meeting was to continue the alignment further north through the large agricultural parcels instead of following West Lake Road to the east and connecting into SR 57 (US 19) closer to the dog track. This modification will be considered for evaluation in Stage 2, as it would limit the number of residential parcel impacts associated with ROW takes along West Lake Road.









SR 57 (US 19)  
MONTICELLO  
BY-PASS  
STUDY



BY-PASS ALTERNATIVES  
STUDY CORRIDORS

FIGURE 7-6